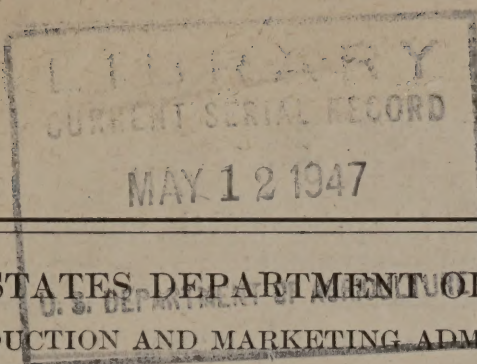


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NER-1010-Conn.

Issued September 14, 1945

UNITED STATES DEPARTMENT OF AGRICULTURE
PRODUCTION AND MARKETING ADMINISTRATION
FIELD SERVICE BRANCH—NORTHEAST DIVISION

**THE 1946 AGRICULTURAL CONSERVATION PROGRAM
FOR CONNECTICUT**

PART I. GENERAL

A. The Program.—The main objectives of the Agricultural Conservation Program as they apply to Connecticut farmers are:

1. To conserve and restore the pasture and croplands of the State.
2. To promote health by restoring to the soil the essential minerals which are lacking.
3. To retard erosion of the soil in those portions of the State which are subject to erosion and to restore soil fertility.
4. To stabilize farm production through sound cropping systems and rotations.

The 1946 Program for Connecticut is designed to meet these objectives by offering practices to farmers which will enable them to produce more and better forage crops and maintain soil fertility.

B. Amount of Assistance Available for Each Farm.—Assistance will be given farmers in carrying out the practices listed in this bulletin by making payments in cash and by furnishing lime and superphosphate for carrying out the practices. Prior approval of the county committee of the extent of any practice for which assistance is available is required. The amount of assistance available for each farmer will depend on the need for the practices on his farm as determined by the county committee and the amount of funds available. The farmer can determine the amount of assistance by presenting his needs to his community committeeman or county committee.

C. Conservation Materials.—Where liming materials and superphosphate are furnished to carry out approved practices, the Government will pay part of the cost of the materials and the farmer will pay part.

In the case of limestone, the farmer will pay \$2 per ton delivered to his farm in bags and \$1 per ton delivered to his farm in bulk.

Superphosphate will be furnished under the contract plan or through local dealers under the purchase order plan. In the case of superphosphate furnished under contract, the farmer will pay 33 cents for each hundredweight. In the case of contract materials, these payments will be made to the county association at the time of placing the order. Where superphosphate is furnished through local dealers under the purchase order plan, the farmer will pay his part of the cost directly to the dealer. The total cost shall not exceed the established fair price.

Following are approved fair prices and the amount of each fair price which will be paid by the Government:

	Fair price per cwt.	Amount paid by Govern- ment
20% superphosphate.....	\$1.18	\$0.80
19% superphosphate.....	1.12	.76
18% superphosphate.....	1.03	.72

D. The program year begins January 1, 1946, and ends December 31, 1946.

PART II. APPROVED PRACTICES AND RATES OF PAYMENT

PRACTICE NO. 1—LIMING MATERIALS

Rates of payment per ton of standard ground limestone or its equivalent:

- \$3.10 in Litchfield County.
- \$3.25 in Fairfield County.
- \$3.35 in Hartford County.
- \$4.00 in New Haven County.
- \$4.10 in Middlesex and Tolland Counties.
- \$4.30 in Windham County.
- \$4.40 in New London County.

Payment will be made for applying liming materials to cropland (being tilled or to be seeded), permanent pasture, poultry range, or commercial orchards. If this practice is carried out with furnished liming materials, it will be shown as Practice No. 1A.

Standard ground limestone is defined as ground limestone which will analyze at least 50 percent total calcium oxide neutralizing equivalent, 100 percent of which will pass through a 20-mesh sieve, with a minimum of 40 percent passing through a 100-mesh sieve and which contains all the finer material produced in grinding. Magnesium oxides will be given a weight of 1.39 when converting to a calcium oxide equivalent.

PRACTICE NO. 2—PHOSPHORIC ACID

Rate of payment: 4 cents per pound of available phosphoric acid (P_2O_5).

This is equivalent to: 80¢ per cwt. for 20% superphosphate; 76¢ per cwt. for 19% superphosphate; 72¢ per cwt. for 18% superphosphate.

Payment will be made for applying superphosphate and available phosphoric acid in mixed fertilizer on (1) open pastureland and seeded pasture including poultry range, (2) new seedings of grasses and legumes, (3) improved hayland (preferably on legume hay and recent seedings), or (4) cover crops and permanent sods in orchards. Superphosphate may also be mixed with manure in the stable or on dropping boards and used on the farm. If this practice is carried out with furnished superphosphate, it will be shown as Practice No. 2A.

Payment will be made for superphosphate mixed with manure only on farms approved by the county committee as farms on which substantially all of the manure will be used on forage crops.

When phosphoric acid is used in connection with a seeding made with a nurse crop, payment will be made only when at least 80 pounds per acre are used.

PRACTICE NO. 3—POTASH

Rate of payment: 2.5 cents per pound of available potash.

Payment will be made for potash alone or in mixed fertilizer used as a topdressing on a good stand of established alfalfa or Ladino clover, or in preparation for seedings of biennial or perennial legumes. When potash is used in connection with a seeding made with a nurse crop, payment will be made only when at least 80 pounds per acre of K_2O are used.

PRACTICE NO. 4—WINTER COVER CROPS

Rate of payment: \$1.50 per acre.

Payment will be made for the growing during the winter of 1945-46 of ryegrass or small grains, as a winter cover crop following any row crop or in orchards. A good stand and a good growth to protect the soil during the winter months will be required. Payment will not be made if the cover crop is harvested for hay or grain.

PRACTICE NO. 5—RYE COVER CROP FOLLOWING POTATOES

Rate of payment: \$2.00 per acre.

Payment will be made for the growing during the winter of 1945-46 of rye as a winter cover crop following a 1945 crop of potatoes. A good stand and a good growth to protect the soil during the winter months will be required. No payment will be made if the cover crop is harvested for hay or grain. If payment is made under this practice, payment will not be made on the same acreage under Practice No. 4.

PRACTICE NO. 6—PLANTING FOREST TREES

Rate of payment: \$7.50 per acre.

Payment will be made for the planting of the following varieties of forest trees in accordance with the recommendations of the Extension Forester at the rate of approximately 1,000 trees per acre: Pine, spruce, fir, hemlock, tamarack, and locust.

ADJUSTMENT IN PAYMENTS

Payments under the 1946 Agricultural Conservation Program are subject to the appropriation hereafter provided for this purpose by the Congress.

A. W. Manchester,
Director, Northeast Division,
Field Service Branch.

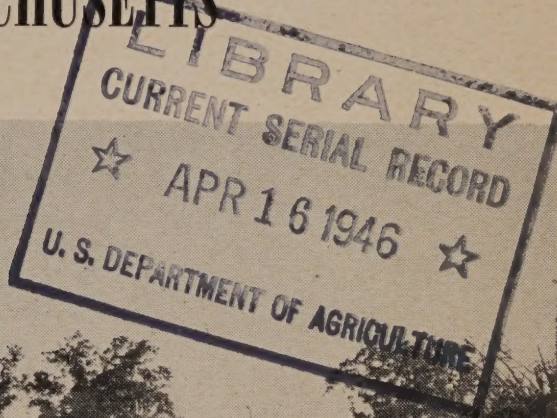
State Committee
Dwight J. Minor (chairman).
Gottfred H. Bahler,
Carlyle H. Gowdy,
Herbert B. Hubbell,
Julian B. Thayer.
R. K. Clapp, Acting Director of
Extension.

WALTER T. CLARK,
State Director of
Production and Marketing Administration.

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Cap 2

THE 1946 AGRICULTURAL CONSERVATION PROGRAM FOR MASSACHUSETTS



COVER CROP YOUR ROW CROP
A winter cover crop after cultivated crops will
SAVE YOUR SOIL . . . BUILD YOUR SOIL

UNITED STATES DEPARTMENT OF AGRICULTURE
PRODUCTION AND MARKETING ADMINISTRATION
FIELD SERVICE BRANCH
NORTHEAST REGION
WASHINGTON 25, D. C.

THE 1946 AGRICULTURAL CONSERVATION PROGRAM FOR MASSACHUSETTS

Part I. GENERAL

A. Amount of assistance available for each farm

Assistance will be given farmers in carrying out the practices listed in this bulletin by making payments in cash and by furnishing lime and superphosphate for carrying out the practices. Prior approval of the county committee of the extent of any practice for which assistance is available is required. The amount of assistance available for each farmer will depend on the need for the practices on his farm as determined by the county committee and the amount of funds available. The farmer can determine the amount of assistance by presenting his needs to his community committeeman or county committee.

B. Conservation materials

As in 1945, the farmer will pay a part of the cost of conservation materials furnished.

For materials furnished under contracts with suppliers, the farmer will pay his part of the cost to the county association at the time the order is taken. In the case of lime, this collection is \$2 per ton delivered to his farm in bags and \$1 per ton delivered to his farm in bulk. In the case of superphosphate, it is 34 cents per hundred pounds.

If superphosphate is furnished through local dealers under the purchase order plan, the farmer will pay his part of the cost directly to the dealer. The total cost shall not exceed the established fair price.

Following are the established fair prices and the amount of each fair price which will be paid by the Government:

	<i>Fair price per cwt.</i>	<i>Amount by Government per cwt.</i>
20 percent superphosphate.....	\$1.19	80 cents
19 percent superphosphate.....	1.13	76 cents
18 percent superphosphate.....	1.04	72 cents

C. Program year

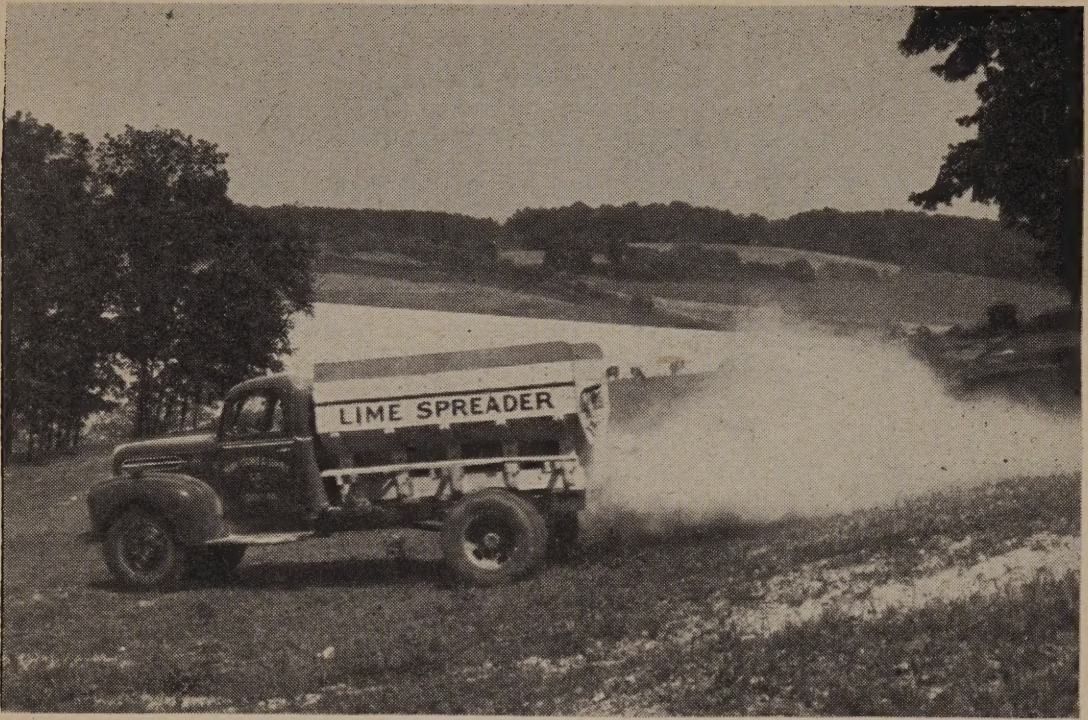
The program year begins January 1, 1946, and ends December 31, 1946.

Part II. PRACTICES AND RATES OF PAYMENT

PRACTICE NO. 1.—Applying lime

Rates of payment per ton of standard ground limestone or its equivalent:

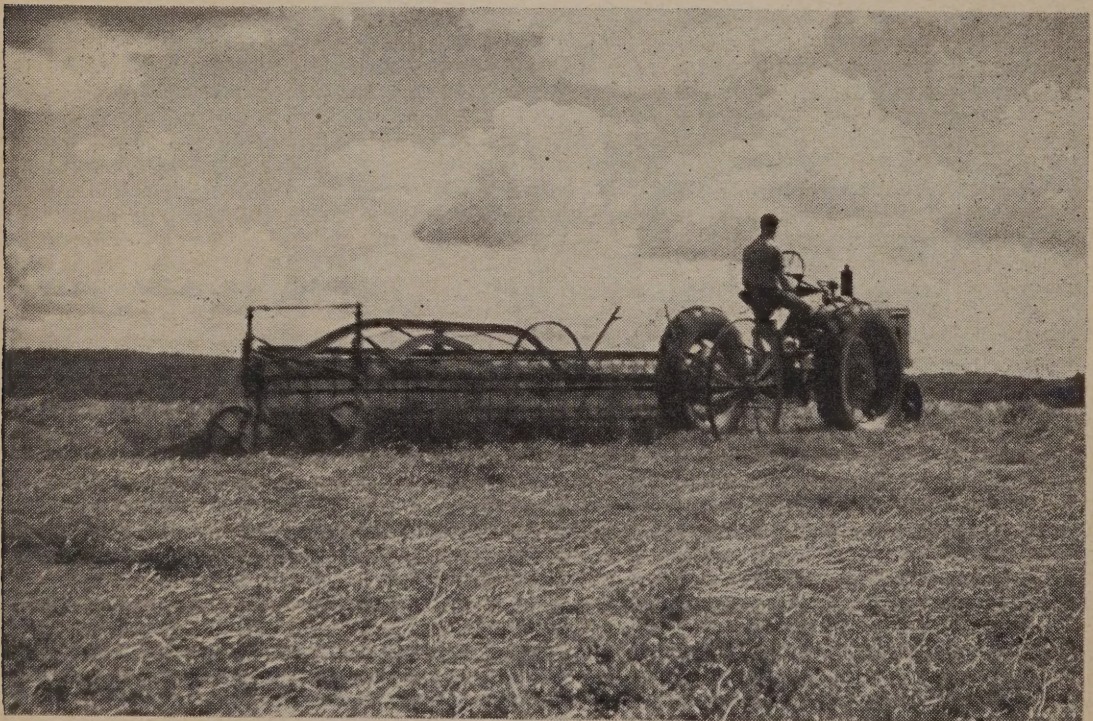
Barnstable County	\$5.15	Hampshire County	\$3.55
Berkshire County	2.55	Middlesex County	4.65
Bristol County	4.75	Nantucket County	9.00
Dukes County	9.00	Norfolk County	4.95
Essex County	4.75	Plymouth County	4.75
Franklin County	3.50	Worcester County	4.45
Hampden County	3.75		



Lime-spreading service is expanding. Trucks equipped with spreaders, similar to the one above, apply the lime to pastures as well as cropland

Payment will be made for applying liming materials to cropland, pasture, poultry ranges, and commercial orchards. If this practice is carried out with furnished lime, it will be reported as Practice No. 1A.

Recommendation.—Whether lime is needed depends on the soil and kind of crop. Too little or too much may result in costly failures. A simple soil test in advance provides needed information



Good yields of clover and timothy result from use of lime, superphosphate, and potash. Growing quality hay is not quite all, however; quality hay *in the mow* is what counts if grain feeding is to be reduced.

and can be secured from many sources that are known to your community committeeman who will tell you about them if you ask him.

Standard ground limestone is defined as ground limestone which will analyze at least 50 percent total calcium oxide neutralizing equivalent, 100 percent of which will pass through a 20-mesh sieve, with a minimum of 40 percent passing through a 100-mesh sieve, and which contains all the finer material produced in grinding. Magnesium oxides will be given a weight of 1.39 when converting to calcium oxide equivalent.

PRACTICE NO. 2.—Applying available phosphoric acid (P_2O_5)

Rate of payment: 4 cents per pound of available phosphoric acid (P_2O_5).

This is equivalent to: 80 cents per cwt. for 20 percent superphosphate; 76 cents per cwt. for 19 percent superphosphate; 72 cents per cwt. for 18 percent superphosphate.



Superphosphate used in the stable at the rate of 1 or 2 pounds per cow per day is becoming established practice on many farms. The fertilizing value of the manure for forage crops is conserved and greatly increased. In addition, this simple method of application improves sanitary conditions in the barn.

Payment will be made for mixing superphosphate with manure in stables and on dropping boards on farms where the county committee determines that substantially all of the manure will be used on forage crops on the farm. Payment will also be made for superphosphate and available phosphoric acid (P_2O_5) in mixed fertilizer when used in connection with the planting or topdressing of legumes and grasses for either forage crops, pasture, poultry ranges, or orchard sods. When used in connection with new seedings made

with nurse crops, at least 80 pounds per acre of phosphoric acid must be applied. If this practice is carried out with furnished superphosphate, it will be reported as Practice No. 2A.



Ladino poultry range like this will result in reduced feed costs and healthier flocks

Recommendations.—Superphosphate favors root development and benefits legumes. Unable to move freely through the soil, superphosphate works best from applications in the soil made during seedbed preparations at the rate of 300 to 800 pounds per acre. Topdressing haylands with superphosphate, except with manure or other plant foods, is not as effective. A practice of using superphosphate in the stable, about 1 pound per cow per day, is an effective use on most dairy farms.

PRACTICE No. 3.—Available potash

Rate of payment: 3 cents per pound of available potash (K_2O).

Payment will be made for applying potash in connection with the planting or topdressing of legumes and grasses for either forage crops, pasture, poultry ranges, or orchard sods. When used in connection with new seedings made with nurse crops, at least 80 pounds per acre of available potash must be applied.

Recommendations.—Field trials indicate that alfalfa and Ladino clover respond to heavy applications of potash. An application of 250–300 pounds of muriate of potash supplementing an application of 0–14–14 will make the plants more thrifty and longer lived. If a mixed fertilizer is used, an application of 400–600 pounds per



Use of potash is an important factor in growing Ladino. This pasture close-up shows the vigorous growth which can be depended upon for several seasons of both pasture and hay.

acre of 0-9-27 would be advisable on alfalfa and Ladino to take care of their high potash requirements.

PRACTICE No. 4.—Winter cover crops

Rate of payment: \$1.50 per acre.

Payment will be made for the number of acres seeded as 1946-47 winter cover crop to rye, wheat, oats, barley, domestic ryegrass, or

vetch. Payment will not be allowed if the crop is harvested for hay or grain.

Recommendations.—Land should be seeded to cover crops so that a good stand and a good growth may be secured before winter, and the crop left on the land over winter to prevent erosion. Seed should be applied at the following rates per acre: Rye, 100 pounds; wheat, 100 pounds; barley, 100 pounds; oats, 80 pounds; domestic ryegrass, 25 pounds; and vetch, 20 pounds.

PRACTICE No. 5.—Mulch

Rate of payment: \$4 per ton of air-dried straw or hay.



Moisture is held, humus added, and general soil life is promoted by mulching orchards, small fruit, or vegetable land

Payment will be made for the application of air-dried straw or hay, as a mulch, to commercial orchards and small fruits or vegetable land. All materials produced on the land during the 1946 program year from grasses, legumes, cover crops, as well as the mulching materials, must be left on the land. Mulching materials that are not air-dried will be paid for on an air-dried basis.

PRACTICE No. 6.—Sanding cranberry bogs

Rate of payment: \$5 per acre.

Payment will be made for sanding fruiting cranberry bogs to a depth of at least one-half inch to restore the productive capacity of bogs on which the plants were injured by severe winter killing in 1945.

Practices Nos. 7 through 12 must be completed in accordance with recommendations of the Soil Conservation Service or the Agricultural Extension Service.

PRACTICE NO. 7.—Diversion ditches

Rate of payment: \$2.25 for each 100 linear feet.

Payment will be made for constructing diversion ditches having an average cross section of at least 10 square feet. Payment will not be made unless the waterway is seeded or sodded and proper outlets and the necessary protective vegetation in the outlets are provided.

PRACTICE NO. 8.—Terracing

Rate of payment: \$1 for each 100 linear feet.

Payment will be made for constructing standard terraces having an average cross section of at least 10 square feet. Payment will not be made unless proper outlets and the necessary protective vegetation in the outlets are provided.

PRACTICE NO. 9.—Contour strip farming

Rate of payment: \$2.50 per acre.



Contour stripcropping is an effective practice for preventing soil erosion. Rainfall needed by the crop soaks into the soil instead of rushing down the slope causing gullies and damage to the crop. This practice results in increased yields and lasting benefit to the farm by saving the topsoil for the future.

Payment will be made for growing alternating strips of close-grown crops or sod, and intertilled crops on the contour. At least

25 percent of the area must be in sod strips in order to qualify. Contour lines must be established and followed.

PRACTICE No. 10.—Contour cultivation of intertilled crops

Rate of payment: \$1.50 per acre.

Payment will be made for the cultivation of intertilled crops on the contour. Contour lines must be established and followed.

PRACTICE No. 11.—Contour seeding of close-grown crops

Rate of payment: 50 cents per acre.

Payment will be made for the seeding of small grains and other close-grown crops on the contour. Contour lines must be established and all operations in connection with the seeding must follow the contour.

PRACTICE No. 12.—Sod waterways

Rate of payment: 75 cents for each 1,000 square feet.

Payment will be made for establishing sod waterways. Outlets and sod waterways include protected natural and constructed channels for the purpose of disposing of run-off in a manner which will prevent erosion. Payment will not be made if carried out as part of Practice No. 7.

ADJUSTMENT IN PAYMENTS

Payments under the 1946 Agricultural Conservation Program are subject to the appropriation hereafter provided for this purpose by the Congress.

A. W. MANCHESTER, *Director*,
Northeast Region,
Field Service Branch,
Production and Marketing
Administration,
Washington 25, D. C.

State AAA Committee:

CHARLIE B. JORDAN, *Chairman*
EDWARD N. DWYER
MELVILLE G. GRAY
HAROLD F. TOMPSON
W. S. MUNSON,
Director of Extension

S. R. PARKER, *State Director*,
Production and Marketing Administration.

State office address:

Massachusetts State College,
Amherst, Mass.

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NMR-1010-Massachusetts
Supplement No. 1

Issued April 22, 1946

UNITED STATES DEPARTMENT OF AGRICULTURE
Production and Marketing Administration
Field Service Branch
Northeast Region

THE 1946 AGRICULTURAL CONSERVATION PROGRAM
FOR MASSACHUSETTS

Supplement No. 1

Bulletin NMR-1010-Massachusetts is hereby amended by adding the following practice:

Practice No. 13. - Planting Forest Trees

Rate of Payment: \$7.50 per acre

Payments will be made for the planting of red pine, white pine, balsam, fir, red spruce, white spruce, or Norway spruce. It is recommended that the trees be planted at the rate of 1,000 trees per acre. Areas planted must be given reasonable protection against fire and damage by livestock grazing. Payment will not be made for planting white pine unless current and gooseberry bushes are removed from the area to be planted and throughout a protective border consistent with good woodland management.

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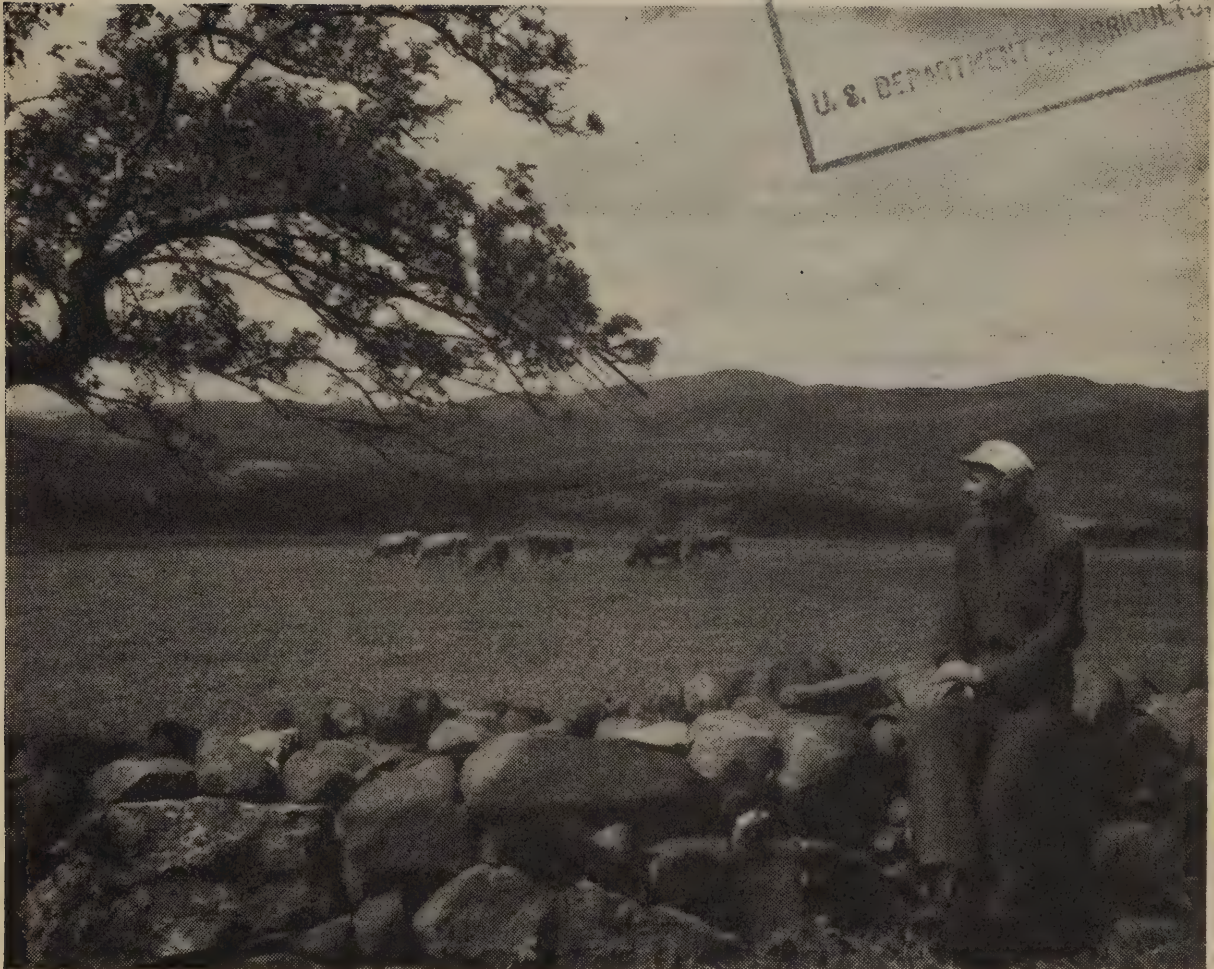
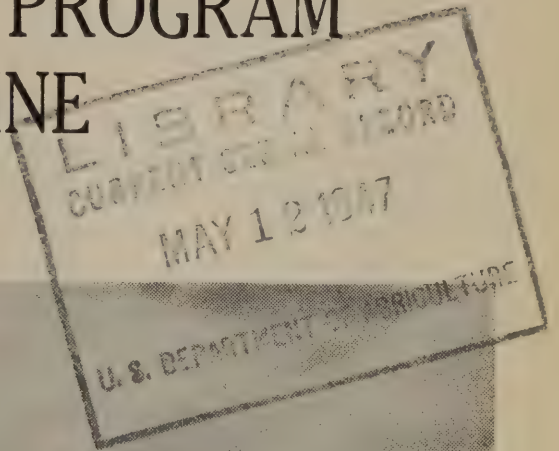
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U. S. DEPARTMENT OF AGRICULTURE

A. A. Manchester
Director, Northeast Region
Field Service Branch

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THE 1946 AGRICULTURAL CONSERVATION PROGRAM FOR MAINE



This highly productive Ladino clover pasture and healthy herd are the results of restoring minerals to the soil.

UNITED STATES DEPARTMENT OF AGRICULTURE
PRODUCTION AND MARKETING ADMINISTRATION
FIELD SERVICE BRANCH
Northeast Region
WASHINGTON 25, D. C.

FOREWORD

It is only recently that most farm people and the public in general have recognized that soils are becoming depleted of minerals—gradually in some areas, rapidly in others, particularly in the heavy rainfall areas of the East. There had always seemed to be an unending supply of good food for those who had the money to buy it; plenty of good land for crops and livestock; unlimited timber supply.

The realization that all was not well became slowly apparent. Here a field and there a farm was abandoned because it was no longer fertile or the topsoil had washed away. Farm woodlots were cut off and neglected. Students of animal and human nutrition warned that feed and food must have adequate mineral content—including calcium and phosphorus—to maintain growth and health of the animal and human population.

A few inches of topsoil is the only source of these minerals for plants and animals, and for humans—*life* depends on it.

A few inches of topsoil is the only source of livelihood for several million farm people—*they* depend on it.

For the past 10 years the Agricultural Conservation Program in Maine has been aimed at assisting farmers to restore soil fertility, and prevent soil and water loss. Maine farmers have shown foresight and judgment in recognizing the need to correct the mineral deficiencies of the soil. They now use nearly 93,000 tons of lime and almost 9,000 tons of superphosphate annually with the assistance of the Agricultural Conservation Program compared with about 14,000 tons of lime and about 1,000 tons of superphosphate, respectively, in 1936 when the program started. They are to be commended for the substantial share of the cost they have borne in purchasing these materials which contribute so much to the immediate and future welfare of Maine agriculture.

BUT THE JOB HAS JUST BEGUN. More than double the present use of lime, and several times the present use of other minerals ought to be applied every year if Maine soil deficiencies are to be corrected, according to Maine soil technicians.

With these things in mind it is the judgment of the Maine State AAA Committee to place considerable emphasis on the use of these materials under the 1946 Agricultural Conservation Program. In addition, assistance is offered for mulching orchards and vegetables, growing winter cover crops, erosion control, and reforestation—practices which will help restore and protect farm resources.

THE MAINE STATE AAA COMMITTEE,

FRED J. NUTTER, *Chairman.*

THE 1946 AGRICULTURAL CONSERVATION PROGRAM FOR MAINE

Part I. GENERAL

A. The Program

The purpose of the 1946 Agricultural Conservation Program for Maine is to encourage farmers to use conservation materials as an aid in increasing and maintaining soil resources and to carry out those practices which help protect the farm soils in the State against serious erosion.

B. Amount of Assistance Available for Each Farm

Assistance will be given farmers in carrying out the practices listed in this bulletin by making payments in cash and by furnishing lime and superphosphate for carrying out the practices. Prior approval of the county committee of the extent of any practice for which assistance is available is required. The amount of assistance available for each farmer will depend on the need for the practices on his farm as determined by the county committee and the amount of funds available. The farmer can determine the amount of assistance by presenting his needs to his community committeeman or county committee.

C. Conservation Materials

Where liming materials and superphosphate are furnished to carry out approved practices, the Government will pay part of the cost of the materials and the farmer will pay part.

In the case of limestone, the farmer will pay \$2.40 per ton delivered to his farm in bags.

Superphosphate will be furnished under the contract plan or through local dealers under the purchase order plan. In the case of superphosphate furnished under contract, the farmer will pay 37 cents for each hundredweight for delivery to the farm. These payments will be made to the county association at the time of placing the order.

In the case of superphosphate furnished through local dealers under the purchase order plan, the farmer will pay his part of the cost directly to the dealer. The total cost shall not exceed the established fair price. Following are fair prices and the amount of each fair price which will be paid by the Government:

	<i>Fair Price</i> (cwt.)	<i>Paid by Government</i> (cwt.)
20 percent superphosphate.....	\$1.26	86.0 cents
19 percent superphosphate.....	1.20	81.7 cents
18 percent superphosphate.....	1.11	77.4 cents

D. Program Year

The program year begins January 1, 1946, and ends December 31, 1946.

Part II. APPROVED PRACTICES AND RATES OF PAYMENT

PRACTICE NO. 1.—Liming Materials:

Rates of payment per ton of standard ground limestone or its equivalent:

\$4.60 in Knox County.

\$4.90 in Lincoln and Waldo Counties.

\$5.20 in Kennebec and Sagadahoc Counties.

\$5.75 in Androscoggin, Cumberland, Franklin, Hancock, Oxford, Penobscot, Piscataquis, Somerset, and York Counties.

\$6.70 in Aroostook County.

\$6.90 in Washington County.

Payment will be made for applying liming materials to cropland, orchards, or permanent pastureland including poultry pasture. If this practice is carried out with furnished liming material, it will be reported as Practice No. 1A.



Lime, superphosphate, and potash made possible this excellent pasture of Ladino clover. Good cows deserve good pasture—an essential of low cost efficient milk production. The cow in the foreground produced 19,600 pounds of milk last year.

It is recommended that at least one-half ton of standard ground limestone or its equivalent or 500 pounds of calcium oxide or its neutralizing equivalent be applied per acre to land not used for the production of potatoes and that not more than 1,500 pounds of standard ground limestone or its equivalent of 750 pounds of calcium oxide or its neutralizing equivalent be applied to land in a potato rotation, unless soil analysis indicates that the soil needs a different rate of application.

In the case of commercial orchard land, payment will be made only for the use of magnesium ground limestone. It is recommended that magnesium ground limestone be applied to all other crops insofar as the supply permits.

It is recommended that 1 ton of ground limestone be applied to improved pasture land every 4 or 5 years.

Standard ground limestone is defined as ground limestone which will analyze at least 50 percent total calcium oxide neutralizing

equivalent, 100 percent of which will pass through a 20-mesh sieve, with a minimum of 40 percent passing through a 100-mesh sieve, and which contains all the finer material produced in grinding. Magnesium oxides will be given a weight of 1.39 when converting to calcium oxide equivalent.

PRACTICE No. 2.—Superphosphate:

Rate of payment: 4.3 cents per pound of available phosphoric acid.

This is equivalent to:

86 cents per cwt. for 20 percent superphosphate.

81.7 cents per cwt. for 19 percent superphosphate.

77.4 cents per cwt. for 18 percent superphosphate.

Payment will be made for superphosphate mixed with manure in stables and on dropping boards on farms where the county committee determines that substantially all of the manure will be used on forage crops on the farm. If this practice is carried out with furnished superphosphate, it will be reported as Practice No. 2A.



Mixing superphosphate with manure in the dairy barn at the rate of 1 or 2 pounds per cow per day for later use on forage crops is rapidly becoming established practice on many farms.

PRACTICE No. 3.—Applying Available Phosphoric Acid and Potash in Mixed Fertilizer:

Rates of payment:

5-10-10 fertilizer.....	\$0.78	7-14-14 fertilizer.....	\$1.09
6-12-12 fertilizer.....	.94	8-16-16 fertilizer.....	1.25
4-12-12 fertilizer.....	.94	5-15-20 fertilizer.....	1.35
4-12-16 fertilizer.....	1.08	0-19-19 fertilizer.....	1.48
0-14-14 fertilizer.....	1.09	0-20-20 fertilizer.....	1.56

Payment will be made for phosphoric acid and potash in mixed fertilizer used in connection with the seeding of biennial or perennial legumes, winter cover crops except small grains, topdressing improved permanent pastures, or topdressing hayland which is predominantly biennial or perennial legumes. When mixed fertilizer is used in connection with seedings made with nurse crops, payment will be made only when 80 pounds of available phosphoric acid are used per acre.



Use of phosphoric acid and potash in mixed fertilizer produces high yields of clover and timothy.

PRACTICE NO. 4.—Mulching Commercial Orchards and Vegetables:
Rates of payment:

4B—\$4 per ton for air-dried hay, straw, or seaweed.

4C—\$3 per ton for dried sawdust or shavings.

Payment will be made for the application of mulching materials to orchards, small fruits or vegetable land as a mulch. It is recommended that at least 1 ton per acre be applied. All materials produced on the land during the 1946 program year from grasses, legumes, green manure crops, or cover crops, as well as the mulching material, must be left on the land. Mulching materials that are not air-dried or dried will be paid for on an air-dried or dried basis.

PRACTICE NO. 5.—Winter Cover Crops:

Rate of payment: \$1.50 per acre.

Payment will be made for leaving on the land during the winter of 1945–46 a good stand and a good growth of a cover crop of winter rye, ryegrass, oats, barley, or millet. Payment will not be made if a crop is harvested for hay or grain.

Practices No. 6 through 11 should be carried out in accordance with recommendations of the Soil Conservation Service or the Agricultural Extension Service.

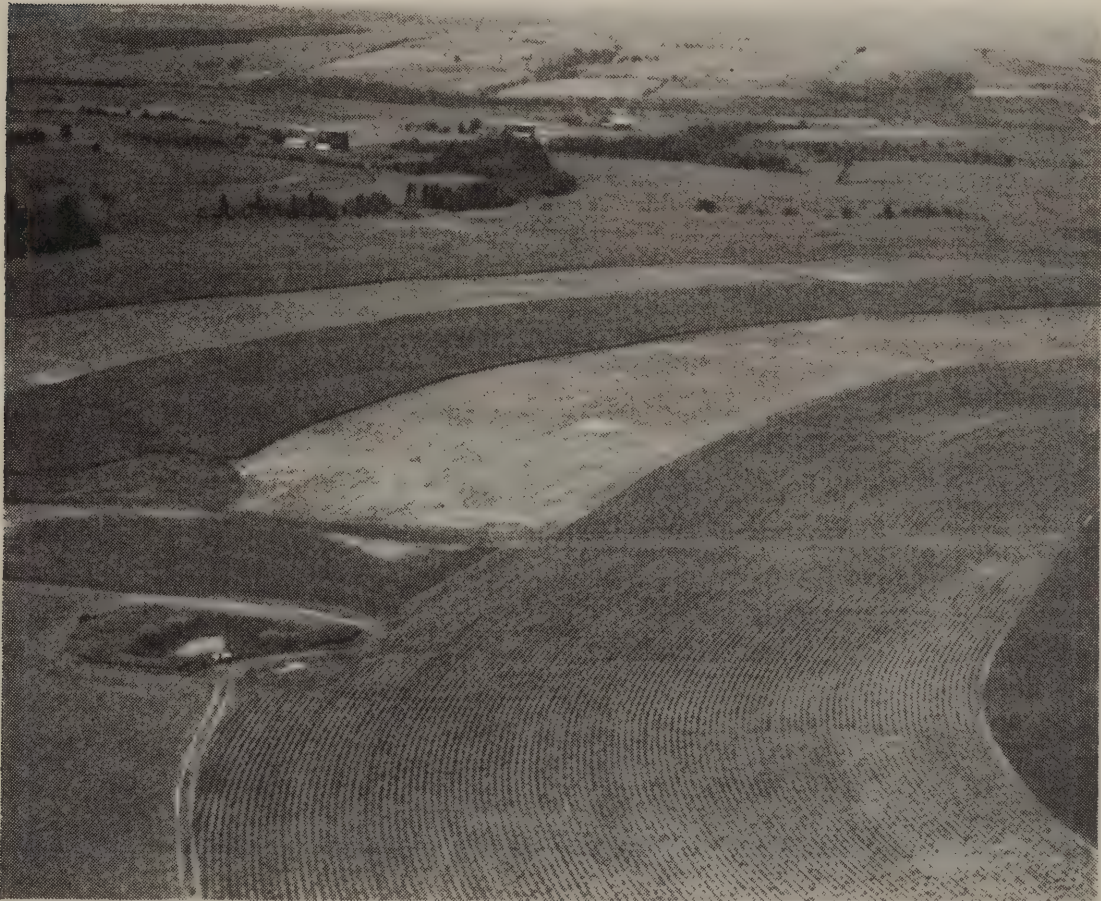
PRACTICE NO. 6.—Constructing Diversion Ditches:

Rate of payment: \$2 for each 100 linear feet.

Payment will be made for the construction of diversion ditches having an average cross section of at least 10 square feet. The waterway must be seeded or sodded and proper outlets provided.



A newly constructed diversion ditch which will be seeded to close cover to prevent washing and sedimentation as it diverts run-off water. Coupled with contour strip-cropping the diversion ditch on the steeper slopes ensures protection to crops and soil from erosion, and increases penetration of rainfall.



These potatoes are planted on the contour with alternate strips of close growing crops. This is an effective practice for preventing soil erosion. Rainfall needed by the crops penetrates the soil instead of rushing down the slope causing gullies and damaging the crop. Both experiments and practical farm operations report increased yields and power efficiency not to mention the lasting benefit to the farm and community from saving the topsoil for the future.

PRACTICE NO. 7.—Contour Strip Farming:

Rate of payment: \$1.50 per acre.

Payment will be made for growing alternating strips of close-grown crops, or sod, and intertilled crops on the contour. At least 10 percent of the area must be in sod strips in order to qualify. Contour lines must be established and followed.

PRACTICE NO. 8.—Contour Cultivation of Intertilled Crops:

Rate of payment: \$1 per acre.

Payment will be made for the cultivation of intertilled crops on the contour. Contour lines must be established and followed.

PRACTICE NO. 9.—Contour Seeding of Close-Grown Crops:

Rate of payment: \$0.50 per acre.

Payment will be made for the seeding of small grains and other close-grown crops on the contour. Contour lines must be established and all operations in connection with the seeding must follow the contour.

PRACTICE NO. 10.—Establishing Sod Waterways:

Rate of payment: \$0.75 per 1,000 square feet.

Payment will be made for establishing permanent sod waterways on cropland which is used for an intertilled crop in 1946, or in cultivated orchards, or on any cropland where it is necessary to complete the establishment of a permanent vegetative cover in a waterway channel, or terrace or diversion outlet.



Under certain conditions sod waterways may be used successfully to retard gullyng and crop damage.

Payment will not be made for this practice unless the waterway is sufficiently wide at all points to carry all water diverted into it under conditions of maximum probable rainfall. Payment will not be made for establishing sod waterways in diversion ditches for which payment is made under Practice No. 6.

PRACTICE NO. 11.—Terracing:

Rate of payment: \$1 for each 100 linear feet.

Payment will be made for the construction of standard terraces which have, after settling, at least 25 cubic yards of earth per 100 linear feet above the original ground level. Payment will not be allowed unless proper outlets and the necessary protective vegetation in the outlets are provided.

PRACTICE NO. 12.—Planting Forest Trees:

Rate of payment: \$7.50 per 1,000 trees.

Payment will be made for the planting of forest trees. It is recommended that forest trees be planted at the rate of at least 1,000 trees per acre spaced at least 6' x 6'. Areas planted must be given reasonable protection against fire and damage by livestock grazing.

Payment will not be made for planting white pine unless currant and gooseberry bushes are removed from the area to be planted and throughout a protective border consistent with good woodland management.

Species recommended for planting are white pine, red (Norway) pine, red spruce, Norway spruce, and Scotch pine in mixed and hybrid poplars.



This seven-year-old stand of reforestation has turned otherwise useless unproductive land into a future source of income to the owner.

ADJUSTMENT IN PAYMENTS

Payments under the 1946 Agricultural Conservation Program are subject to the appropriation hereafter provided for this purpose by the Congress.

A. W. MANCHESTER,
Director,
Northeast Region,
Field Service Branch,
Production and Marketing
Administration,
U. S. Department of Agri-
culture,
Washington 25, D. C.

State AAA Committee:

FRED J. NUTTER, *Chairman.*
 ROBERT H. BOOTHBY.
 HAROLD J. SHAW.
 MILTON E. SMITH.
 THOMAS R. YORK.
 A. L. DEERING, *Director of*
Extension.

LAWRENCE A. CHATTO, *Execu-*
tive Assistant to the State
Committee.

State Office Address:

University of Maine, Orono,
 Maine.

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1616-1010-14d no
Supplement No. 1

Issued April 11, 1946

UNITED STATES DEPARTMENT OF AGRICULTURE
Production and Marketing Administration
Field Service Branch
Northeast Region

THE 1946 AGRICULTURAL CONSERVATION PROGRAM
FOR MAINE

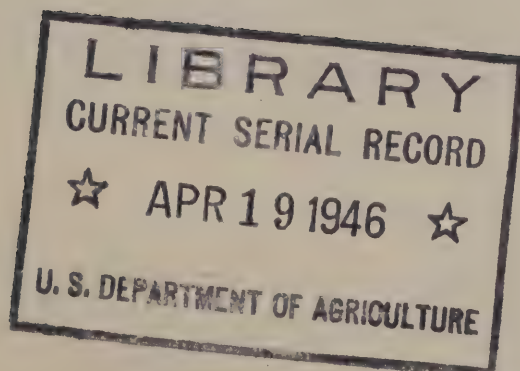
Supplement No. 1

The rates of payment for Practice No. 3 - Applying Available
Phosphoric Acid and Potash in Mixed Fertilizer - are hereby
amended to read as follows:

Practice No. 3B - Rate of Payment: 4.3 cents per
pound of available phosphoric
acid (P_2O_5).

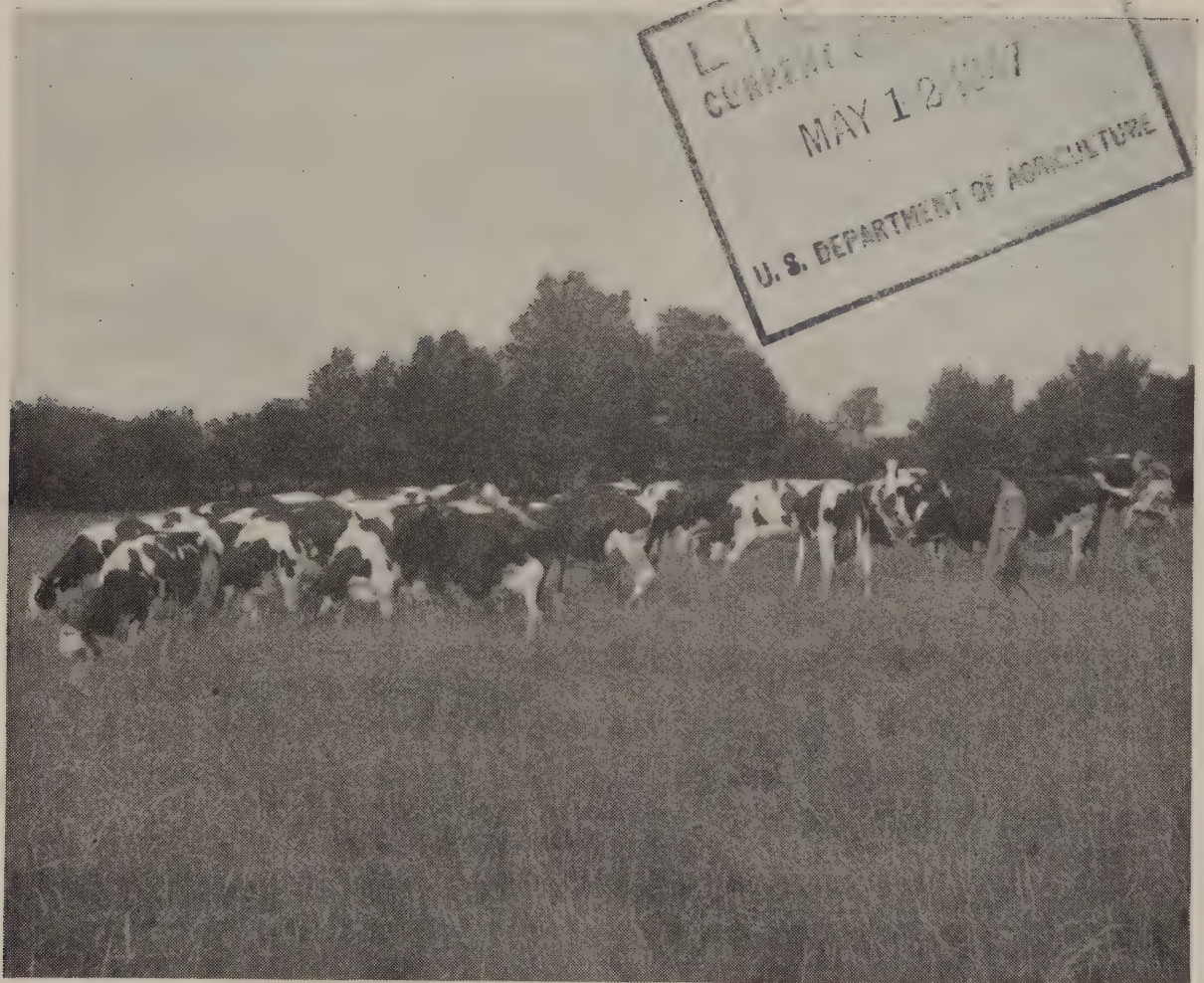
Practice No. 3C - Rate of Payment: 3.5 cents per
pound of available potash (K_2O).

A. W. Manchester
Director, Northeast Region



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THE 1946 AGRICULTURAL CONSERVATION PROGRAM FOR NEW HAMPSHIRE



At milking time is when this New Hampshire dairyman reaps the harvest of his pasture improvement work.

UNITED STATES DEPARTMENT OF AGRICULTURE
PRODUCTION AND MARKETING ADMINISTRATION
FIELD SERVICE BRANCH
Northeast Region
WASHINGTON 25, D. C.

FOREWORD

With the close of 1945, the farmers of New Hampshire had been using the Agricultural Conservation Program 10 years to restore and conserve the agricultural resources of the State. During the last 4 years of that period, they used the program with strong emphasis upon increasing production of food to meet the emergency needs of our Nation at war. Fortunately, however, the Agricultural Conservation Program, with its emphasis upon lime and superphosphate to improve hayland and pastures, was doing the very thing most helpful in meeting one of the important war needs—dairy products.

We start the new decade with an assurance that we did not, and could not, have in those pioneering days of 1936. We have the assurance from success of large scale operations in all parts of the State that the practices we have encouraged are fully effective in achieving the objectives of the Program.

The Program in 1946, therefore, will continue to offer assistance for the application of lime, superphosphate, and potash. Recognizing that on many New Hampshire farms there is much land that needs to be cleared, leveled, and seeded before it can be used for pasture, a practice for clearing land for pasture is offered.

Inasmuch as the materials and services available under the program are insufficient to do all that needs to be done each year in the way of agricultural conservation, it is very important that materials and services be allotted to those farms where they will accomplish the most restoring and conserving agricultural resources.

Therefore, it will be necessary for each participant in the program to indicate what his plans are with reference to using lime, superphosphate, potash, and for carrying out the practice for clearing land for pasture.

The New Hampshire State AAA Committee,
J. RALPH GRAHAM, *Chairman*.

THE 1946 AGRICULTURAL CONSERVATION PROGRAM FOR NEW HAMPSHIRE

Part I. GENERAL

A. Amount of Assistance Available for Each Farm

Assistance will be given farmers in carrying out the practices listed in this bulletin by making payments in cash and by furnishing lime and superphosphate for carrying out the practices. Prior approval of the county committee of the extent of any practice for which assistance is available is required. The amount of assistance available for each farmer will depend on the need for the practices on his farm as determined by the county committee and the amount of funds available. The farmer can determine the amount of assistance by presenting his needs to his community committeeman or county committee.

Technical assistance in connection with carrying out the practices on your farm can be obtained from your county agricultural agent.

B. Conservation Materials

Lime and superphosphate will be furnished as conservation materials. The Government will pay part of the cost of the materials and the farmer will pay part. In the case of lime, the farmer will pay \$1.20 for each ton ordered in bags at the railroad siding and 20 cents for each ton ordered in bulk. In the case of superphosphate furnished under contract, the farmer's payment will be 37 cents per hundredweight. These payments will be made to the county association at the time of placing the order.

If superphosphate is furnished through local dealers, the farmer will pay his part of the cost directly to the dealer. The total cost shall not exceed the established fair price. Following are fair prices and the amount of each fair price which will be paid by the Government:

	FAIR PRICE PER CWT.			PAID BY GOVERNMENT PER CWT.		
	20 %	19 %	18 %	20 %	19 %	18 %
Belknap, Cheshire, Hillsboro, Merri- mack, Rocking- ham, Strafford, and Sullivan Counties-----	\$1.19	\$1.13	\$1.04	\$0.84	\$0.798	\$0.756
Carroll, Coos, and Grafton counties--	1.23	1.16	1.08	.84	.798	.756

C. Program Year

The program year begins January 1, 1946, and ends December 31, 1946.

Part II. APPROVED PRACTICES AND RATES OF PAYMENT

PRACTICE No. 1.—Liming Material:

Rate of payment: \$4.70 per ton of standard ground limestone or its equivalent.

Payment will be made for applying liming material to cropland, pasture, poultry range, or commercial orchards. If this practice is carried out with furnished liming material, it will be shown as Practice No. 1A.

Standard ground limestone is defined as ground limestone which will analyze at least 50 percent total calcium oxide neutralizing equivalent, 100 percent of which will pass through a 20-mesh sieve, with a minimum of 40 percent passing through a 100-mesh sieve and which contains all the finer material produced in grinding. Magnesium oxides will be given a weight of 1.39 when converting to a calcium oxide equivalent.



The excellent stand of his Ladino clover pasture is examined by this New Hampshire farmer and his son. Lime, superphosphate, and potash make possible the establishment and growth of this outstanding legume. Properly handled Ladino yields well for several years and provides succulent forage for a longer period during the pasture season than most legumes and grasses.

Highly productive leguminous pasture—essential of low-cost milk production—is the aim of New Hampshire dairymen.

PRACTICE No. 2.—Phosphoric Acid:

Rate of payment: 4.2 cents per pound of available phosphoric acid (P_2O_5).

This is equivalent to: 84 cents per cwt. for 20-percent superphosphate, 79.8 cents per cwt. for 19 percent superphosphate, 75.6 cents per cwt. for 18 percent superphosphate.

WHEN USED WITH MANURE.—Payment will be made for mixing superphosphate with manure in the stable or on dropping boards and applying the manure to cropland, pastures, poultry ranges, or orchards on the farm to which it is furnished. Payment will be made only on farms approved by the county committee as farms on which substantially all of the manure will be used on forage crops.

WHEN NOT USED WITH MANURE.—Payment will be made for superphosphate and available phosphoric acid in mixed fertilizer used in connection with seeding legumes and grasses upon cropland, pastures, and poultry ranges; as a top dressing on hayland and pasture; or on sod in orchards. When phosphoric acid is used in connection with a seeding made with a nurse crop, payment will be made only when at least 80 pounds per acre are used.

If this practice is carried out with furnished superphosphate, it will be shown as Practice No. 2A.



Mixing superphosphate with manure in the dairy barn at the rate of 1 or 2 pounds per cow per day for use on forage crops is rapidly becoming established practice on many farms.

PRACTICE No. 3.—Potash:

Rate of payment: 3 cents per pound of available potash.

This is equivalent to \$1.80 per cwt. for 60 percent muriate of potash.

Payment will be made for available potash alone or in mixed fertilizer used in connection with seeding legumes and grasses on cropland, pastures, and poultry ranges; as a top dressing on hayland and pasture; or on sod in orchards. When potash is used in connection with a seeding made with a nurse crop, payment will be made only when at least 80 pounds of available potash are used.



This close-up shows the thick sward of Ladino clover. A real soil builder, it provides both hay and pasture of the very best quality. After yielding several crops of hay and being pastured several times the Ladino pictured here is still thrifty.

PRACTICE NO. 4.—Clearing Land for Pasture:

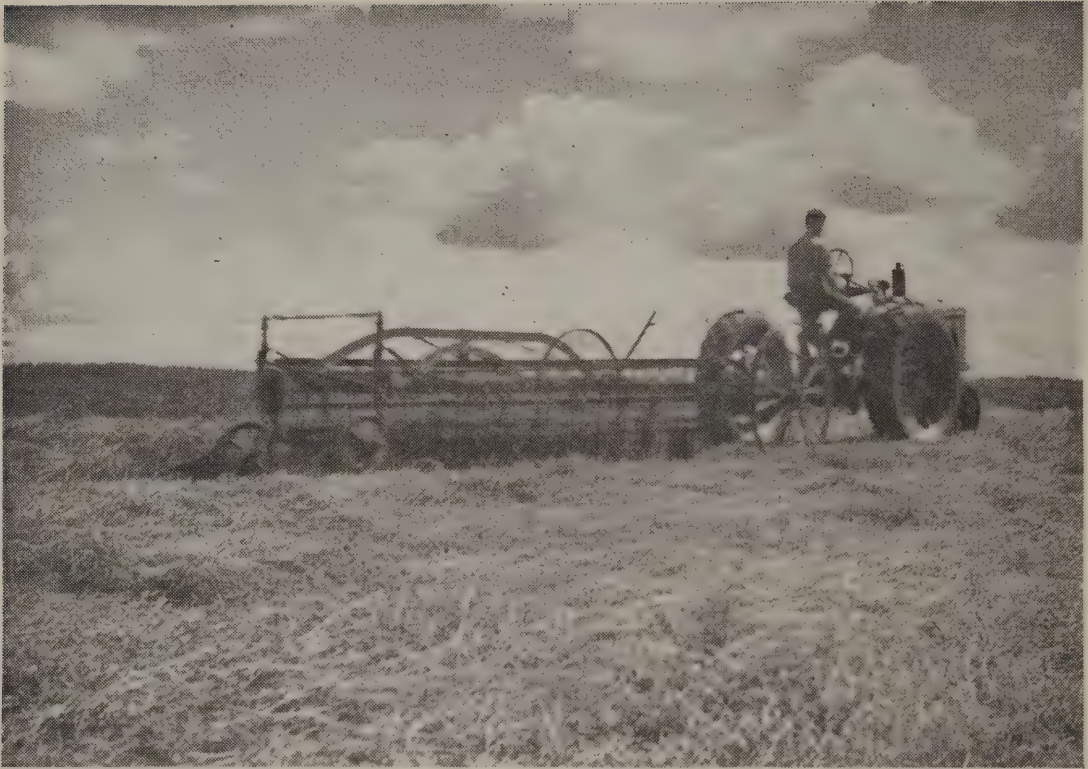
Rate of payment: \$10 per acre, not to exceed \$50 per farm.

Payment will be made for clearing land of rock, stones, brush, trees, and stumps, and leveling hummocks where necessary, for pasture, when the cost per acre as estimated by the county committee is \$20 or more. Recommended amounts of lime, phosphoric acid, potash, and approved pasture seed mixture must be used. It is recommended that the practice be carried out under the technical supervision of the Soil Conservation Service or the Agricultural Extension Service.



Clearing the land for pasture is under way on this farm. The two fields in the background have been cleared, limed, and fertilized, and now produce good feed for this New Hampshire farmer's excellent dairy.

For fields such as that in the foreground, which yield little but juniper and weeds, the Agriculture Conservation Program assists with the expense of getting the land ready for pasture improvement by clearing away juniper, rocks, trees, and brush, and leveling the hummocks.



Lime, superphosphate, and potash pave the way for good yields of clover and timothy hay. But growing quality hay is not quite all—quality hay *in the mow* is what counts if it is really going to help keep down the grain feeding costs.

ADJUSTMENTS IN PAYMENTS

The rates of practice payments may be adjusted on the basis of funds hereafter made available by Congress and according to the extent of participation in the program.

A. W. MANCHESTER,
Director, Northeast Region, Field Service Branch, Production and Marketing Administration, Washington 25, D. C.

State AAA Committee:

J. RALPH GRAHAM, *Chairman.*

ALBERT N. FLETCHER.

ALFRED E. HOUSTON.

H. B. STEVENS, *Director of Extension.*

EARL P. ROBINSON, *Executive Assistant to the State Committee.*

Address of State Office:

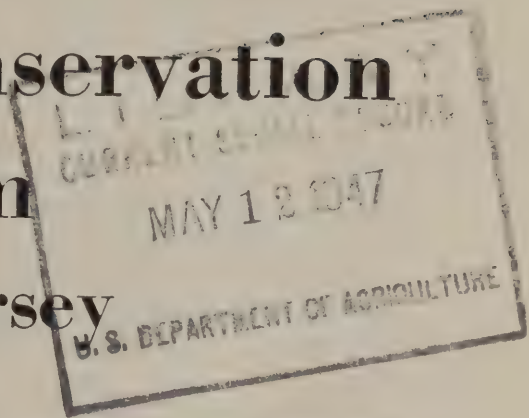
University of New Hampshire,
Durham, New Hampshire.

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The 1946 Agricultural Conservation Program For New Jersey



The cover crop on this field holds the soil in place through the winter.

UNITED STATES DEPARTMENT OF AGRICULTURE
Production and Marketing Administration
Field Service Branch
Northeast Region
Washington 25, D. C.

FOREWORD

New Jersey farmers are to be commended for the progress they have made during the past 10 years in rebuilding and protecting the soil, water, and woodland resources of their State, not only in their own interest, but that of future generations and of the general public.

Soil fertility is essential to the low-cost, efficient production of an ample supply of food. It is a necessity from the standpoint of animal and human nutrition since the supply of calcium, phosphorus, and other life-sustaining minerals required for a growing and healthy population comes from the few inches of topsoil in the possession of the farmer.

New Jersey farmers have recognized that soil mineral deficiencies exist. The progress they have made in correcting them is shown by the fact that the use of lime is now more than three times greater than it was a decade ago; the use of superphosphate for soil building purposes has increased nearly seven times; cover crop acreage likewise has more than doubled. These gains have been made since 1936 when the Agricultural Conservation Program started. Pastures and cropland which have been limed and fertilized now produce legumes which increase soil productivity and help lower the cost of production, whereas formerly the immediate needs of many individual farmers for the necessities of life forced them to mine the soil of its accumulated fertility.

While much of this progress has been stimulated through the help of the Agricultural Conservation Program, the more than 11,000 New Jersey farmers who annually participate have borne a substantial part of the cost. They have shown foresight and judgment in recognizing that the cost will be returned many times in the form of better farms and a better fed Nation.

But the job has just begun.—New Jersey has approximately one million acres of cropland. About half of that is planted each year to cultivated crops such as corn, potatoes, and vegetables. Most of this cultivated land is left bare all winter. The resulting losses in topsoil, minerals, and organic matter from erosion and leaching is enormous. Only a small beginning has been made in the use of erosion control practices, such as cover crops, contour stripcropping, and other effective measures which will stop this loss.

Although the use of lime has increased from a total of 50,000 tons in 1935, prior to the Agricultural Conservation Program, to more than 200,000 tons in 1945, the use is still much less than it should be. New Jersey soil technicians estimate that at least 350,000 tons should be used every year if the State's annual total need is met, including accumulated soil deficiencies from past years. The need for the other minerals is also much greater than present use.

Since much remains to be done it is the judgment of the New Jersey State AAA Committee, based upon recommendations of the county and community committees, to emphasize the use of lime, superphosphate, potash, and cover crops, and in addition offer practices to encourage the control of erosion.

NEW JERSEY STATE AAA COMMITTEE,
JACOB A. BLAKESLEE, *Chairman.*

THE 1946 AGRICULTURAL CONSERVATION PROGRAM FOR NEW JERSEY

Part I. GENERAL

A. The program

The 1946 Agricultural Conservation Program for New Jersey in general has been built with the ultimate goal of preventing loss of our soil resources when the maximum production of all farms is necessary. The program has been developed with the assistance of an Advisory Technical Committee composed of members from the Agricultural College, Experiment Station, Extension Service, and Soil Conservation Service.

Under the 1946 program, county committees will have more responsibilities for adapting the program to the agricultural needs of the county. Lime and superphosphate will be furnished as conservation material or a farmer may buy and receive payment for applying them. Farmers wishing more information concerning any part of the program should contact their county offices or any member of their county or community committees.

B. Amount of assistance available for each farm

Assistance will be given farmers in carrying out the practices listed in this bulletin by making payments in cash and by furnishing lime and superphosphate for carrying out the practices. Prior approval of the county committee of the extent of any practice for which assistance is available is required. The amount of assistance available for each farmer will depend on the need for the practices on his farm as determined by the county committee and the amount of funds available. The farmer can determine the amount of assistance by presenting his needs to his community committeeman or county committee.

C. Conservation materials

Where liming materials and superphosphate are furnished to carry out approved practices, the Government will pay part of the cost of the materials and the farmer will pay part.

In the case of limestone, the farmer will pay \$2 per ton delivered to his farm in bags and \$1 per ton delivered to his farm in bulk. This payment will be made to the county association at the time of placing the order.

In the case of superphosphate, which will be furnished through local dealers under the purchase order plan, the farmer will pay his part of the cost directly to the dealer. The total cost shall not exceed the established fair price.

Fair prices per ton of superphosphate at dealer's warehouse:

<i>Counties</i>	<i>18%</i>	<i>19%</i>	<i>20%</i>
Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Middlesex, Monmouth, Ocean, and Salem.	\$19.00	\$20.80	\$22.00
Bergen, Essex, Hunterdon, Morris, Passaic, Somerset, Sussex, Union, and Warren.	19.40	21.20	22.40

The part of the fair price that will be paid to the dealer by the Government:

20% superphosphate.....	\$15.20 per ton
19% superphosphate.....	14.44 per ton
18% superphosphate.....	13.68 per ton

D. Program year

The program year begins January 1, 1946, and ends December 31, 1946.

Part II. APPROVED PRACTICES AND RATES OF PAYMENT

PRACTICE No. 1.—Liming Materials

Rates of payment per ton of standard ground limestone or its equivalent:

\$3.50 in Sussex County; \$3.70 in Morris and Warren Counties; \$3.80 in Passaic County; \$3.90 in Camden and Gloucester Counties; \$4.00 in Burlington and Mercer Counties; \$4.10 in Atlantic, Bergen, Cumberland, Essex, Hunterdon, Middlesex, Monmouth, Ocean, Salem, Somerset, and Union Counties; \$4.20 in Cape May County.



Lime must be delivered the year around if suppliers are to fill all orders. This means temporary storage on many farms. Keep it dry—inside if possible. When stored outside protect the bottom of the pile with boards and provide some sort of cover. It will handle easier and save you time.

Payment will be made for applying liming materials to cropland, pastureland, or orchards. If this practice is carried out with furnished liming materials, it will be shown as Practice No. 1A.

It is recommended that the rate of application per acre be at least 1,000 pounds of standard ground limestone or its equivalent in other liming material, except where a soil test shows that less should be applied.

It is suggested that a farmer have his soil tested to determine the amount of lime needed.

Standard ground limestone is defined as ground limestone which will analyze at least 50 percent total calcium oxide neutralizing equivalent, 100 percent of which will pass through a 20-mesh sieve, with a minimum of 40 percent passing through a 100-mesh sieve and which contains all the finer material produced in grinding. Magnesium oxides will be given a weight of 1.39 when converting to calcium oxide equivalent.

The following are equivalents of 2,000 pounds of standard ground limestone:

- (1) 1,400 pounds of hydrated lime.
- (2) 2,225 pounds of moist limestone.
- (3) 6,000 pounds of acetylene waste lime.

The equivalent of ground oyster shell will be determined in accordance with the definition of standard ground limestone.

PRACTICE No. 2.—Available Phosphoric Acid:

Rate of payment: 3.8 cents per pound of available phosphoric acid (P_2O_5).

This is equivalent to—76 cents per cwt. for 20 percent superphosphate, 72.2 cents per cwt. for 19 percent superphosphate, 68.4 cents per cwt. for 18 percent superphosphate.

Payment will be made for applying available phosphoric acid in superphosphate or mixed fertilizer on (1) established hayland, (2) established pastures, (3) winter cover crops, except small grains seeded alone, (4) cover crops in orchards, (5) summer legumes for hay or cover crops, or (6) new seedings of grass or legumes with or without a nurse crop. Superphosphate may be mixed with manure in the stable or on dropping boards on farms where the county committee determines that substantially all of the manure is used on forage crops. When phosphoric acid is used in connection with a seeding made with a nurse crop, payment will be made only when at least 80 pounds per acre are used. If this practice is carried out with furnished superphosphate, it will be reported as Practice No. 2-A.

PRACTICE No. 3.—Potash:

Rate of payment: 3 cents per pound of available potash.

Payment will be made for applying available potash on (1) established hayland, (2) established pastures, or (3) new seedings of grasses or legumes with or without a nurse crop. When potash is used in connection with a seeding made with a nurse crop, payment will be made only when at least 80 pounds of available potash per acre are used.

PRACTICE No. 4.—Ryegrass Cover Crop:

Rate of payment: \$2.50 per acre.

Payment will be made for growing, on cropland or in orchards, a good stand and growth of ryegrass as a cover crop in 1946. It is recommended that 20 pounds of seed be used per acre.

PRACTICE No. 5.—Rye, Vetch, and Crimson Clover—Winter Cover Crop:

Rate of payment: \$2 per acre.

Payment will be made for growing on cropland or in orchards a good stand and a good growth of rye, vetch, or crimson clover or mixtures of these which is left on the land during the winter of 1945-46. No payment will be made if harvested for hay or grain.



Lime, superphosphate, and potash pave the way for Ladino pasture. This thick sward is still vigorous after having been pastured several seasons. In addition, it has yielded several crops of hay. Ladino is a real soil builder and contributes much to efficient milk production.

It is recommended that the following amounts of seed be used per acre:

Rye—1½ to 2 bushels per acre.

Vetch—30 pounds per acre if seeded alone.

Vetch and rye mixture—20 pounds vetch and 1 bushel rye per acre.

Crimson clover—20 pounds per acre.

PRACTICE No. 6.—Wheat and Sweetclover—Winter Cover Crop:

Rate of payment: \$1.50 per acre.

Payment will be made for growing on cropland or in orchards a good stand and good growth of sweetclover or wheat which is left on the land during the winter of 1945–46. Sweetclover will qualify only if the land on which it is grown is tilled in 1946. No payment will be made if harvested for hay or grain.

PRACTICE No. 7.—Summer Cover Crop:

Rate of payment: \$1.50 per acre.

Payment will be made for growing during the summer of 1946 a good growth and a good stand on cropland or in orchards of summer legumes, millet, sudan grass or oats, or mixtures of these which are left on the land during the winter or followed by a fall sown crop. No payment will be made if harvested for hay or grain.

PRACTICE No. 8.—Seeding Poultry Range:

Rate of payment: \$3 per acre.

Payment will be made for the seeding of a poultry range on a properly prepared seed bed. This practice will be approved for



Soil fertility goes up and the feed bill goes down when pullets are grown on a good legume range. Proper seed mixture with recommended amounts of lime and fertilizer resulted in this range which provides a good supply of forage for this healthy flock.

payment only where satisfactory amounts of lime and fertilizer are applied where needed. It is recommended that one of the following seed mixtures be used:

Heavy soils—per acre:
 Perennial ryegrass—6 pounds.
 Timothy—5 pounds.
 Alsike—5 pounds.
 Ladino—2 pounds.
 Light soils—per acre:
 Perennial ryegrass—6 pounds.
 Timothy—3 pounds.
 Red Top—3 pounds.
 Alsike—4 pounds.
 Alfalfa—6 pounds.

PRACTICE NO. 9.—Sanding Cranberry Bogs:

Rate of payment: \$5 per acre.

The application of sand, free from stones and loam, to a depth of at least one-half inch on fruiting cranberry bogs to prevent soil deterioration and decline in the productive capacity of the land.

PRACTICE NO. 10.—Mulching:

Rate of payment: \$5 per ton.



Mulched soils permit moisture and air to penetrate. Biological activity of the soil is improved.

Payment will be made for applying air-dried hay, straw, or salt hay to commercial orchards, vineyards, small fruits, or vegetable land as a mulch. All materials produced on the land during 1946 from grasses, legumes, green-manure crops, as well as the mulching material, are to be left on the land. It is recommended that at least 1 ton of air-dried straw or its equivalent be used per acre. Mulching materials that are not air-dried will be paid for on an air-dried basis.

Practices No. 11 through 15 should be carried out in accordance with recommendations of the Soil Conservation Service or the Agricultural Extension Service.

PRACTICE No. 11.—Subsoiling:

Rate of payment: \$2.25 per acre.

Payment will be made for subsoiling to a depth which effectively shatters the hard pan or plow sole at intervals not exceeding 4 feet.

PRACTICE No. 12.—Contour Strip Farming:

Rate of payment: \$2.50 per acre.

Payment will be made for growing alternating strips of close-grown crops or sod and intertilled crops on the contour. At least 25 percent of the area must be in sod strips in order to qualify. Contour lines must be established and followed.

PRACTICE No. 13.—Contour Cultivation of Intertilled Crops:

Rate of payment: \$1.50 per acre.

Payment will be made for the cultivation of intertilled crops on the contour. Contour lines must be established and followed.

PRACTICE No. 14.—Diversion Ditches:

Rate of payment: \$2.25 per hundred linear feet.

Payment will be made for constructing diversion ditches having an average cross section of at least 10 square feet. Payment will not be made unless the waterway is seeded or sodded and proper outlets provided.

PRACTICE No. 15.—Sod Waterways:

Rate of payment: 75 cents per 1,000 square feet.

Payment will be made for establishing permanent sod waterways on cropland which is used for an intertilled crop in 1946, or in cultivated orchards, or on any cropland where it is necessary to complete the establishment of a permanent vegetative cover in a waterway channel, or terrace or diversion outlet. Payment will not be made unless the waterway has an average width of 10 feet or more and the channel is sufficiently wide at all points to carry all water diverted into it under conditions of maximum probable rainfall. Payment will not be allowed for this practice if carried out as part of Practice No. 14.

UNITED STATES DEPARTMENT OF AGRICULTURE
PRODUCTION AND MARKETING ADMINISTRATION
FIELD SERVICE BRANCH

NORTHEAST REGION, WASHINGTON 25, D. C.

**THE 1946 AGRICULTURAL CONSERVATION PROGRAM
FOR NEW YORK**

Part I. GENERAL

A. Objective

The 1946 Agricultural Conservation Program for New York is designed to assist farmers in maintaining and increasing the conservation of the soil resources on their farms.

B. Program Year

The program year begins January 1, 1946, and ends December 31, 1946.

C. Amount of Assistance Available for Each Farm

Assistance will be given farmers in carrying out the practices listed in this bulletin by making payments in cash and by furnishing lime and superphosphate for carrying out the practices. Prior approval of the county committee of the extent of any practice for which assistance is available is required. The amount of assistance available for each farmer will depend on the need for the practices on his farm as determined by the county committee and the amount of funds available. The farmer can determine the amount of assistance by presenting his needs to his community committeeman or county committee.

D. Conservation Material

Where liming material and superphosphate are furnished as conservation material, the Government will pay part of the cost of the material and the farmer will pay part.

In the case of lime, the farmer will pay \$2 per ton of standard ground limestone or its equivalent, delivered to his farm in bags and \$1 per ton delivered to his farm in bulk. This payment will be made to the county association at the time of placing the order.

In the case of superphosphate, which will be furnished through local dealers under the purchase order plan, the farmer will pay his part of the cost directly to the dealer. The total cost shall not exceed the established fair price.

Fair Prices per Ton for Superphosphate at Dealer's Siding

<i>Area</i>	<i>18 percent</i>	<i>19 percent</i>	<i>20 percent</i>
1. Nassau, Richmond, Rockland, and Suffolk Counties.....	\$19.60	\$21.40	\$22.60
2. Orange and Ulster Counties.....	20.00	21.80	23.00
3. Clinton, Essex, Franklin, and St. Lawrence Counties.....	21.40	23.20	24.40
4. All other counties.....	20.60	22.40	23.60

The part of the fair price that will be paid to the dealer by the Government:

20 percent superphosphate	\$16.00
19 percent superphosphate	15.20
18 percent superphosphate	14.40

The deduction and credit rates for lime and superphosphate furnished as conservation material will be the same as the payment rate for the practice.

Part II. PRACTICES AND RATES OF PAYMENT

PRACTICE No. 1. Liming Materials:

Rates of payment per ton of standard ground limestone or its equivalent:

- \$3.00 in Columbia, Fulton, Herkimer, Madison, and Niagara Counties.
- \$3.10 in Albany, Orleans, and Rensselaer Counties.
- \$3.20 in Dutchess, Jefferson, Montgomery, and Onondaga Counties.
- \$3.30 in Oneida, Putnam, and Westchester Counties.
- \$3.40 in Cortland and Schenectady Counties.
- \$3.50 in Chenango, Orange, Schoharie, and Washington Counties.
- \$3.60 in Cayuga, Genesee, Greene, Oswego, Saratoga, Ulster, and Wayne Counties.
- \$3.70 in Erie, Otsego, and Rockland Counties.
- \$3.80 in Broome, Seneca, and Tompkins Counties.
- \$3.90 in Ontario, Tioga, and Yates Counties.
- \$4.00 in Chautauqua, Chemung, Lewis, Livingston, Monroe, and Schuyler Counties.
- \$4.10 in Delaware, Sullivan, and Wyoming Counties.
- \$4.20 in Allegany, Cattaraugus, Clinton, St. Lawrence, Steuben, and Warren Counties.
- \$4.30 in Essex and Franklin Counties.
- \$4.60 in Richmond County.
- \$5.30 in Nassau County.
- \$5.60 in Suffolk County.

Payment will be made for applying liming material to (1) cropland on which a good stand of perennial legumes is growing or on which legumes will be seeded in 1946, 1947, or 1948, (2) permanent pastures, or (3) commercial orchards. If this practice is carried out with furnished liming materials, it will be reported as Practice No. 1-A.

Standard ground limestone is defined as ground limestone which will analyze at least 50 percent total calcium oxide neutralizing equivalent, 100 percent of which will pass through a 20-mesh sieve, with a minimum of 40 percent passing through a 100-mesh sieve and which contains all the finer material produced in grinding. Magnesium oxides will be given a weight of 1.39 when converting to calcium oxide equivalent.

PRACTICE No. 2. Superphosphate:

Rate of payment:

4 cents per pound of available phosphoric acid (P_2O_5).

This is equivalent to:

- 80 cents per cwt. for 20 percent superphosphate.
- 76 cents per cwt. for 19 percent superphosphate
- 72 cents per cwt. for 18 percent superphosphate.

Payment will be made for the use of available phosphoric acid (1) in connection with establishing seedings of legumes or mixtures of legumes and grasses for forage or cover crops or (2) as a top-dressing on established pastures, orchard sods, or perennial legumes. Payment will also be made for superphosphate mixed with manure in the stable or on dropping boards on farms, where the county committee determines that substantially all the manure will be used on forage crops on the farm. When phosphoric acid is used in connection with a seeding made with a nurse crop, payment will be made only when at least 80 pounds per acre are used. If this practice is carried out with furnished superphosphate, it will be reported as Practice No. 2-A.

PRACTICE NO. 3. Potash:

Rate of payment: 2.8 cents per pound of available potash (K_2O).

Payment will be made for the application of available potash (K_2O) either in a mixed fertilizer or alone, (1) in connection with establishing seedings of legumes or mixtures of legumes and grasses for forage or cover crops, or (2) as a top dressing on established pastures, orchard sods, or perennial legumes. When used in connection with new seedings made with nurse crops, at least 80 pounds of available potash must be applied.

PRACTICE NO. 4. Winter Cover Crops:

Rate of payment: \$1.50 per acre.

Payment will be made for leaving on cropland or in orchards as a cover crop over the winter of 1945-46, a good stand and a good growth of small grains, ryegrass, millet, sudan grass, vetch, annual legumes, or mixtures of these. Payment will not be made if the crop has been or will be harvested for hay or grain.

PRACTICE NO. 5. Summer Green Manure Crops:

Rate of payment: \$1.50 per acre.

Payment will be made for growing during the summer of 1946 a good growth and a good stand on cropland or in orchards of annual legumes, small grains, millet, or sudan grasses which are plowed under in the fall and followed by a fall sown crop. The crop will not qualify for payment if harvested for hay or grain, or if payment is made for the crop under Practice No. 4.

PRACTICE NO. 6. Mulching Commercial Orchards and Vegetables:

Rate of payment: \$4 per ton.

The application of air-dried straw or hay, or its equivalent, excluding barnyard or stable manure, as a mulch, to commercial orchards, small fruits, or perennial vegetable land. It is recommended that at least 2 tons per acre be applied. All materials produced on the land during the 1946 program year from grasses, legumes, green manure crops, or cover crops as well as the mulching material

must be left on the land. Such crops or material, however, may be plowed under or disked.

PRACTICE NO. 7. Pasture Seeding:

Rate of payment: \$2 per acre.

Payment will be made for seeding the following pasture mixtures at the recommended rates per acre for the establishment of pastures. Payment will be made only if a seed bed has been prepared and adequate amounts of lime and superphosphate are applied.

Cornell Utility Mixture.—Recommended for use where the fertility of the soil is low to medium and the soil is not suited to alfalfa.

	<i>Pounds</i>
Timothy.....	6
Redtop.....	2
Kentucky bluegrass.....	4
Canada bluegrass.....	2
Mammoth red clover.....	3
Alsike clover.....	2
Ladino clover.....	1
TOTAL PER ACRE.....	20

Cornell General Purpose Mixture.—Recommended for use where the soil is high in fertility, not drouthy, well supplied with lime, and fairly well adapted to alfalfa.

	<i>Pounds</i>
Timothy.....	6
Kentucky bluegrass.....	6
Alfalfa.....	5
Medium red clover.....	2
Ladino clover.....	1
TOTAL PER ACRE.....	20

Cornell Special Pasture Mixture.—Recommended for use to establish permanent pastures on soils high in fertility and where good grazing management will be followed.

	<i>Pounds</i>
Kentucky bluegrass.....	12
Perennial ryegrass.....	5
Creeping red fescue.....	5
Birdsfoot trefoil.....	2
Wild white clover.....	1
TOTAL PER ACRE.....	25

Cornell Ladino Grass Mixtures.—Recommended for late-summer or all-season grazing. It is suited to a wide range of soil conditions but should not be seeded on extremely wet, dry, or poor soil conditions.

	<i>Pounds</i>
Orchard grass.....	8
Timothy.....	6
Ladino clover.....	2
TOTAL PER ACRE.....	16

Cornell Poultry Pasture Mixture.—Recommended for poultry ranges.

	<i>Pounds</i>
Kentucky bluegrass.....	12
Ladino clover.....	2
TOTAL PER ACRE.....	14

Alfalfa-Smooth Brome Seeding.—Recommended for most dry situations where subsoil conditions are favorable for alfalfa.

	<i>Pounds</i>
Smooth brome grass or orchard grass.....	8
Alfalfa.....	8
TOTAL PER ACRE.....	16

One pound of ladino clover should be added if the seeding is to be heavily grazed.

Ladino-Timothy Seeding.—Adapted to land which is too wet or heavy for alfalfa.

	<i>Pounds</i>
Timothy.....	7
Ladino clover.....	2
TOTAL PER ACRE.....	9

PRACTICE NO. 8. Seeding Ladino Clover on Established Pastures:

Rate of payment: \$1.25 per acre.

Payment will be made for seeding at least 1 pound of ladino clover seed per acre on established pastures. Payment will be made only if adequate amounts of lime and superphosphate are applied.

This practice must be carried out in accordance with recommendations of the Agricultural Extension Service.

PRACTICE No. 9. Planting Forest Trees:

Rate of payment: \$7.50 per 1,000 trees.

Payment will be made for the planting of forest trees. It is recommended that forest trees be planted at the rate of at least 1,000 trees per acre, spaced at least 6 feet by 6 feet. Areas planted must be given reasonable protection against fire and damage by livestock grazing.

Payment will not be made for planting white pine unless currant and gooseberry bushes are removed from the area to be planted and throughout a protective border consistent with good woodland management.

The following varieties of forest trees are recommended for planting: Balsam fir, black locust, Douglas fir, European larch, Jack pine, Japanese larch, Norway spruce, red oak, red pine, Scotch pine, sugar maple, white ash, white cedar, white pine, and white spruce.

PRACTICE No. 10. Removing Trees From Pastures:

Rate of payment: 5 cents per tree but not in excess of \$5 per acre.

Payment will be made for the eradication of dwarf juniper, thorn apple, and wild apple trees from pasture by mechanical or chemical means.

PRACTICES No. 11 THROUGH 16 MUST BE CARRIED OUT IN ACCORDANCE WITH RECOMMENDATIONS OF THE SOIL CONSERVATION SERVICE OR THE AGRICULTURAL EXTENSION SERVICE.

PRACTICE No. 11. Tile Drainage Systems:

Rates of payment:

For 3-inch tile—3½ cents per foot.

For 4-inch tile—4 cents per foot.

For 6-inch tile—7½ cents per foot.

Payment will be made for installing tile drainage systems on cropland or in orchards.

PRACTICE No. 12. Open Drainage Ditches:

Rates of payment:

12B. 8 cents per cubic yard but not to exceed 8 cents per linear foot for ditches more than 3 feet wide at the bottom.

12C. 8 cents per cubic yard but not to exceed 2½ cents per linear foot for ditches having a width of 3 feet or less at the bottom.

Payment will be made for constructing and enlarging permanent open drainage ditches for draining cropland and orchards. Clearing out fill-in from original ditches will not qualify for payment.

PRACTICE No. 13. Diversions:

Rate of payment: 2¼ cents per linear foot.

Payment will be made for the construction of diversions having an average cross section of at least 10 square feet. Payment will not be made unless the waterway is seeded or sodded and proper outlets and the necessary protective vegetation in the outlets are provided.

PRACTICE No. 14. Terraces:

Rate of payment: 1 cent per linear foot.

Payment will be made for the construction of standard terraces which have, after settling, at least 25 cubic yards of earth fill per 100 linear feet above the original ground level. Payment will not be allowed unless proper outlets and the necessary protective vegetation in the outlets are provided.

PRACTICE No. 15. Sod Waterways:

Rate of payment: 75 cents per 1,000 square feet.

Payment will be made for establishing permanent sod waterways on cropland which is used for an intertilled crop in 1946, or in cultivated orchards, or on any cropland where it is necessary to complete the establishment of a permanent vegetative cover in a waterway channel, terrace, or diversion outlet. Payment will not be allowed for this practice unless the waterway has an average width of 10 feet or more and the channel is sufficiently wide at all points to carry all water diverted into it under conditions of maximum probable rainfall. Payment will not be made for this practice if carried out as part of Practice No. 13.

PRACTICE No. 16. Contour Stripcropping:

Rate of payment: \$2.50 per acre.

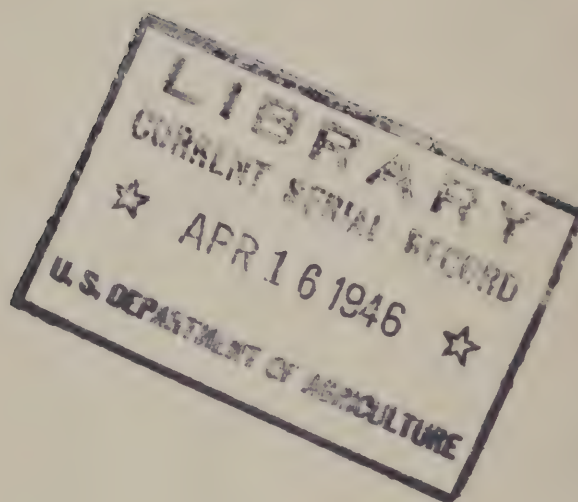
Payment will be made for establishing alternating strips of close-grown crops or sod and intertilled crops on the contour on cropland. At least 25 percent of the area must be in sod strips in order to qualify. Contour lines must be established and followed.

A. W. MANCHESTER,
*Director, Northeast Region,
Field Service Branch.*

State Committee
ROBERT J. HOWARD, *Chairman.*
DAVID G. AGNE.
CARL N. EMERLING.
FERRIS G. TALMAGE.
L. R. SIMONS, *Director of
Extension.*

W. T. GRAMS, *Executive
Assistant.*





UNITED STATES DEPARTMENT OF AGRICULTURE
PRODUCTION AND MARKETING ADMINISTRATION
FIELD SERVICE BRANCH
NORTHEAST REGION, WASHINGTON 25, D. C.

THE 1946 AGRICULTURAL CONSERVATION PROGRAM
FOR RHODE ISLAND

Part I. GENERAL

A. The program year begins January 1, 1946, and ends December 31, 1946.

B. The objective of the Agricultural Conservation Program is to conserve, maintain, and rebuild soil fertility; to encourage farmers to carry out practices which will protect the farm soils of the State against further depletion and serious damage. The program is designed to utilize the funds available by encouraging practices which will achieve the greatest return in soil fertility and protection with emphasis on the needs of livestock, potato, vegetable and fruit farms, and other farms having unusual erosion hazards.

C. Amount of Assistance Available for Each Farm

Assistance will be given farmers in carrying out the practices listed in this Bulletin by making payments in cash and by furnishing lime and superphosphate for carrying out the practices. Prior approval of the county committee of the extent of any practice for which assistance is available is required. The amount of assistance available for each farmer will depend on the need for the practices on his farm as determined by the county committee and the amount of funds available. The farmer can determine the amount of assistance by presenting his needs to his community committeeman or county committee.

D. Conservation Materials

Lime and superphosphate will be furnished as conservation materials. The Government will pay part of the cost of the materials and the farmer will pay part. In the case of lime, the farmer will pay \$1.50 for each ton ordered in bags at the railroad siding and 50 cents for each ton ordered in bulk. In the case of superphosphate furnished under contract, the farmer's payment will be 35 cents per hundredweight. These payments will be made to the county association at the time of placing the order. If superphosphate is furnished through local dealers, the farmer will pay his part of the cost directly to the dealer. The total cost shall not exceed the established fair price. Following are fair prices and the amount of each fair price which will be paid by the Government:

	Fair price per cwt.	Amount paid by Government per cwt.
20% superphosphate.....	\$1.20	\$0.80
19% superphosphate.....	1.14	.76
18% superphosphate.....	1.05	.72

Part II. PRACTICES AND PAYMENTS

PRACTICE No. 1.—Liming materials:

Rate of payment per ton of standard ground limestone or its equivalent: \$4.50 per ton.

Payment will be made for liming materials applied to cropland which will be tilled in 1946 or 1947, orchards, permanent pasture land and poultry ranges, or on good stands of biennial or perennial legumes. If this practice is carried out with furnished lime, it will be reported as Practice No. 1A.

Standard ground limestone is defined as ground limestone which will analyze at least 50 percent total calcium oxide neutralizing equivalent, 100 percent of which will pass through a 20-mesh sieve, with a minimum of 40 percent passing through a 100-mesh sieve and which contains all the finer material produced in grinding. Magnesium oxides will be given a weight of 1.39 when converting to calcium oxide equivalent.

PRACTICE No. 2.—Available phosphoric acid:

Rate of payment: 4 cents per pound of available phosphoric acid.

This is equivalent to: 80 cents per cwt. for 20 percent superphosphate; 76 cents per cwt. for 19 percent superphosphate; 72 cents per cwt. for 18 percent superphosphate.

Payment will be made for the use of superphosphate or available phosphoric acid in mixed fertilizer in connection with—

The planting of the following for forage or cover crops: Alfalfa, red, alsike, sweet, ladino and white dutch clovers, vetch, soybeans, and field peas. When phosphoric acid is used in connection with a seeding made with a nurse crop, payment will be made only when at least 80 pounds per acre are used.

The top dressing of permanent pasture sods, poultry ranges, good stands of alfalfa, alsike, red and ladino clovers, cover crops in orchards or permanent sods in orchards.

Payment will also be made for superphosphate mixed with manure in the stable or on dropping boards and used on the farm to which it is furnished. Payment for this use will be made only on farms on which the county committee determines that substantially all of the manure will be used on forage crops.

If this practice is carried out with furnished superphosphate, it will be reported as Practice No. 2A.

PRACTICE No. 3.—Potash:

Rate of payment: 2.5 cents per pound of available potash (K_2O).

This is equivalent to: \$1.50 per cwt. for 60 percent muriate of potash.

Payment will be made for the use of available potash alone or in mixed fertilizer in connection with—

The planting of the following for forage or cover crops: Alfalfa, red, alsike, sweet, ladino and white dutch clovers, vetch, soybeans.

and field peas. When potash is used in connection with a seeding made with a nurse crop, payment will be made only when at least 80 pounds per acre are used.

The top dressing of permanent pasture sods, poultry ranges, good stands of alfalfa, alsike, red and ladino clovers, cover crops in orchards or permanent sods in orchards.

It is recommended that phosphoric acid and potash contained in mixed fertilizers of the following ratios be used on lands used for growing the crops shown opposite the ratio:

- 1-1-1—Top dressing grass, hay, and permanent pasture only.
- 1-2-2—Seeding and top dressing ladino clover.
- 1-3-4—Seeding and top dressing alfalfa and clover.
- 0-1-1 or 0-1-2—Top dressing clovers and alfalfa.

PRACTICE No. 4.—Winter cover crops:

Rate of payment: \$1.50 per acre.

Payment will be made for leaving on the land during the winter of 1945-46 a cover crop of winter wheat, rye, or ryegrass. The winter wheat or rye may be used as support crops for winter vetch. Payment will not be made for a crop if harvested for grain or hay.

Practices No. 5 through 10 must be completed in accordance with recommendations of the Soil Conservation Service or the Extension Service.

PRACTICE No. 5.—Terraces and diversion ditches:

Rate of payment: \$1.50 per 100 linear feet.

Payment will be made for constructing standard terraces and diversion ditches having an average cross section of at least 10 square feet. Proper outlets and necessary protective vegetation in the outlets must be provided.

PRACTICE No. 6.—Terraces and diversion ditches:

Rate of payment: \$1 per 100 linear feet.

Payment will be made for constructing standard terraces and diversion ditches having an average cross section of less than 10 square feet. Proper outlets and necessary vegetation in the outlets must be provided.

PRACTICE No. 7.—Establishing sod waterways and outlets:

Rate of payment: 75 cents per 1,000 square feet.

Payment will be made for establishing permanent sod waterways on cropland which is used for an intertilled crop in 1946, in cultivated orchards, in diversion ditches, or on any cropland where it is necessary to complete the establishment of a permanent vegetative cover in a waterway channel, terrace, or diversion outlet. Payment will not be allowed unless the waterway has an average width of 10 feet or more and the channel is sufficiently wide at all points to carry all water diverted into it under conditions of maximum probable rainfall.

PRACTICE No. 8.—Stripcropping:

Rate of payment: 50 cents per acre.

Payment will be made for establishing stripcropping on land not previously stripcropped. Strips of intertilled crops must be separated by strips of close-growing crops.

PRACTICE No. 9.—Tile drainage:

Rates of payment per foot: 4 cents for 3-inch tile; 5 cents for 4-inch tile; 6 cents for 5-inch tile; 8 cents for 6-inch tile.

Payment will be made for installing tile under drains. Proper outlets must be provided.

PRACTICE No. 10.—Construction of open drainage ditches:

Rates of payment:

10B—8 cents per cubic yard but not to exceed 8 cents per linear foot for ditches more than 3 feet wide at the bottom.

10C—8 cents per cubic yard but not to exceed $2\frac{1}{4}$ cents per linear foot for ditches having a width of 3 feet or less at the bottom.

Payment will be made for constructing and enlarging permanent open drainage ditches for draining cropland and orchards. Cleaning out fill-in from original ditches will not qualify for payment.

ADJUSTMENT IN PAYMENTS

Payments under the 1946 Agricultural Conservation Program are subject to the appropriation hereafter provided for this purpose by the Congress.

ADMINISTRATION

Authority for the administration of the 1946 Agricultural Conservation Program is assigned to the county and community committeemen respectively. Details of administration will be set forth in memoranda issued by the State Committee.

Addresses of county and State offices follow:

Bristol.....	Greenville, R. I.
Kent.....	Wakefield, R. I.
Newport.....	Newport, R. I.
Providence.....	Greenville, R. I.
Washington.....	Wakefield, R. I.

State Office, Production and Marketing Administration,
Field Service Branch, Rhode Island State College,
Kingston, R. I.

This program is approved by the Rhode Island State AAA Committee listed below:

A. W. MANCHESTER,
Director, Northeast Region,
Field Service Branch.

State Committee:

OSCAR R. HALLENE, *Chairman.*
FRANK ALMEIDA.

HENRY H. BARTON.

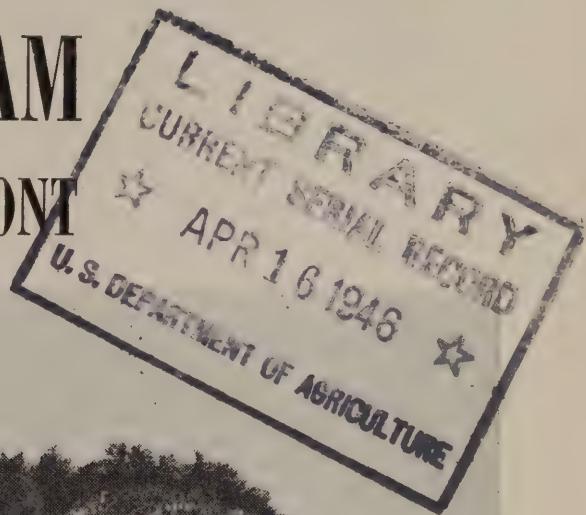
H. O. STUART, *Director of Extension.*

RALPH S. SHAW, *State Director of Production and Marketing Administration.*



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THE 1946 AGRICULTURAL CONSERVATION PROGRAM FOR VERMONT



Good pasture—aim of the Vermont dairyman.

UNITED STATES DEPARTMENT OF AGRICULTURE
PRODUCTION AND MARKETING ADMINISTRATION
FIELD SERVICE BRANCH
NORTHEAST REGION
WASHINGTON 25, D. C.

FOREWORD

The prosperity and future welfare of Vermont agriculture depend in large measure on good yields of quality hay and pasture—essentials of low-cost efficient milk production.

Since the beginning of the Vermont Agricultural Conservation Program in 1936 there has been a very noticeable trend in the State toward retirement of the poorer soils to reforestation and more intensive use of the better soils. This trend became possible through the tremendously increased use of lime and superphosphate which is resulting in increased yields of high quality legume hay and improved leguminous pastures. Longer seasons of productive pasture are another result contributing to efficient milk production.

The foresight and judgment of Vermont farmers in recognizing the need to correct the mineral deficiencies of the soil is shown by the fact that they have used more than 100,000 tons of lime annually during the past 2 years with the assistance of the Agricultural Conservation Program compared with about 3,500 tons annually prior to 1936. The same applies to superphosphate of which between 20,000 and 30,000 tons are now used annually compared with less than 4,000 tons prior to the Agricultural Conservation Program. Vermont farmers are to be commended for the substantial share of the cost they have borne in purchasing these materials which contribute so much to the immediate and future welfare of Vermont agriculture.

BUT THE JOB HAS JUST BEGUN. Approximately 250,000 tons of lime and 250,000 tons of superphosphate ought to be used every year if Vermont soil deficiencies are to be corrected, according to a careful appraisal by Vermont soil technicians.

Since the value of lime and superphosphate practices in Vermont has been well demonstrated and since a great need for these minerals still exists, it is the judgment of the Vermont State Committee to offer these practices again in 1946. In addition, a practice for the use of complete fertilizer on hay and pasture land, and one for mulching orchard trees are offered.

THE VERMONT STATE AAA COMMITTEE,
E. FRANCIS BRANON, *Chairman.*

THE 1946 AGRICULTURAL CONSERVATION PROGRAM FOR VERMONT

The Program Year Begins January 1, 1946,
and Ends December 31, 1946

Part I. GENERAL

A. The Program.—The 1946 Agricultural Conservation Program, as in previous years, stresses the improvement of hay and pasture land through the use of lime and superphosphate. Practices for the use of mixed fertilizer or potash on hay and pasture land is included to enable farmers to increase the yields on land already treated with the necessary minerals.

B. Amount of Assistance Available for Each Farm.—Assistance will be given farmers in carrying out the practices listed in this bulletin by making payments in cash and by furnishing lime and superphosphate for carrying out the practices. Prior approval of the county committee of the extent of any practice for which assistance is available is required. The amount of assistance available for each farmer will depend on the need for the practices on his farm as determined by the county committee and the amount of funds available. The farmer can determine the amount of assistance by presenting his needs to his community committeeman or county committee.

C. Conservation Materials.—Where liming materials and superphosphate are furnished to carry out approved practices, the Government will pay part of the cost of the materials and the farmer will pay part.

In the case of limestone, the farmer will pay \$2 per ton delivered to his farm in bags and \$1 per ton delivered to his farm in bulk. In the case of superphosphate, the farmer will pay 37 cents per cwt. These payments will be made to the county association at the time of placing the order.

Part II. APPROVED PRACTICES AND RATES OF PAYMENT

Practice No. 1.—Liming Materials.

Rates of payment per ton of standard ground limestone* or its equivalent:

\$2.50 in Franklin and Grand Isle Counties;

2.90 in Chittenden County;

3.00 in Rutland County;

3.10 in Addison County;

3.50 in Bennington, Lamoille, Washington, and Windham Counties;

4.00 in Orleans and Windsor Counties;

4.50 in Caledonia, Essex, and Orange Counties.

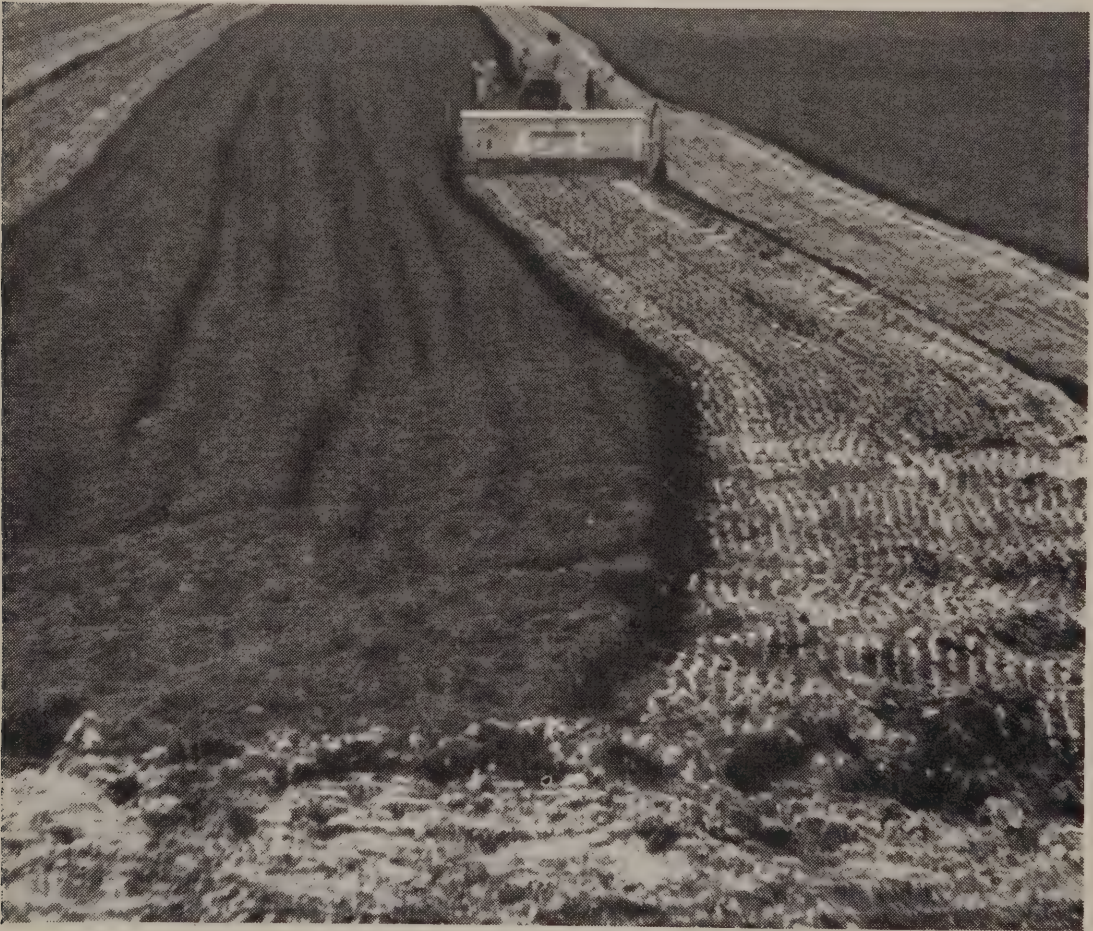
*Standard ground limestone is defined as ground limestone which will analyze at least 50 percent total calcium oxide neutralizing equivalent, 100 percent of which will pass through a 20-mesh sieve, with a minimum of 40 percent passing through a 100-mesh sieve and which contains all the finer material produced in grinding. Magnesium oxides will be given a weight of 1.39 when converting to calcium oxide equivalent.

Payment will be made for applying liming material to cropland which has been or will be tilled in 1945-46-47 or on which a good stand of perennial legumes is growing. It may also be used to top dress permanent pasture land or orchard sod. If this practice is carried out with furnished liming material, it will be shown as Practice No. 1A.

RECOMMENDATIONS FOR USE OF LIMESTONE

How Much?—In general, 2 tons of limestone per acre, once in the rotation, are required for most soils in Vermont on which a 5- or 6-year rotation is being followed. One ton per acre every 5 or 6 years is generally adequate where limestone is used as top dressing on permanent hay and pasture sods.

How and Where?—Limestone applied to land being prepared for corn will have become well incorporated with the soil before the seeding that follows. When applied on plowed ground in the fall, the soil surface should be left in a rough condition to minimize blowing and washing. When applied as top dressing to hay and pasture land, special care should be taken to apply it evenly.



Spreading lime with a lime sower. Note the even distribution obtained by this method.

Dry limestone is most effectively applied with a lime sower or distributor or any one of the several rotary-disk type spreaders that can be attached behind a truck or wagon. Spreading limestone by hand or with a shovel, requires considerably more time and frequently results in uneven distribution unless carefully done.

If the limestone is wet and the bags are soft and badly broken, one of the most effective methods of spreading is to apply it on top of the manure in the spreader. This is also a good method for applying dry limestone. Limestone loses none of its strength or value after wetting. The loss comes from the difficulty in handling and spreading.



Lime may be spread with a manure spreader by applying it on top of the load.

When?—Ground limestone may be spread at most any time of the year when the ground is firm enough to support spreading equipment. In general, however, the best time to apply limestone is immediately after plowing and before the soil is disked and fitted for planting.

RECOMMENDATIONS ON STORAGE OF LIME

Lime must be produced and delivered the year around to supply more than 100,000 tons annually to Vermont. Therefore, in many cases temporary farm storage will be necessary.

Keep it dry. Inside a building or shed is best; free from moisture. The lime should be placed on a platform under which air is permitted to circulate.



A shed is adequate temporary storage.
Note boards beneath pile of lime.



For longer periods store lime inside in a place free from moisture.

Field storage of lime for short periods is next best. When this is necessary some sort of covering such as a heavy tarpaulin should be satisfactory, or depending on the season and length of storage, a roof extending well beyond the edges of the pile supported by stout poles is usually adequate. In either case it is also advisable to protect the bottom of the pile with boards.



Lime and superphosphate pave the way for Ladino clover pasture like this one.

Practice No. 2.—**Superphosphate.**

Rate of payment: 4.5 cents per pound of available phosphoric acid (P_2O_5).

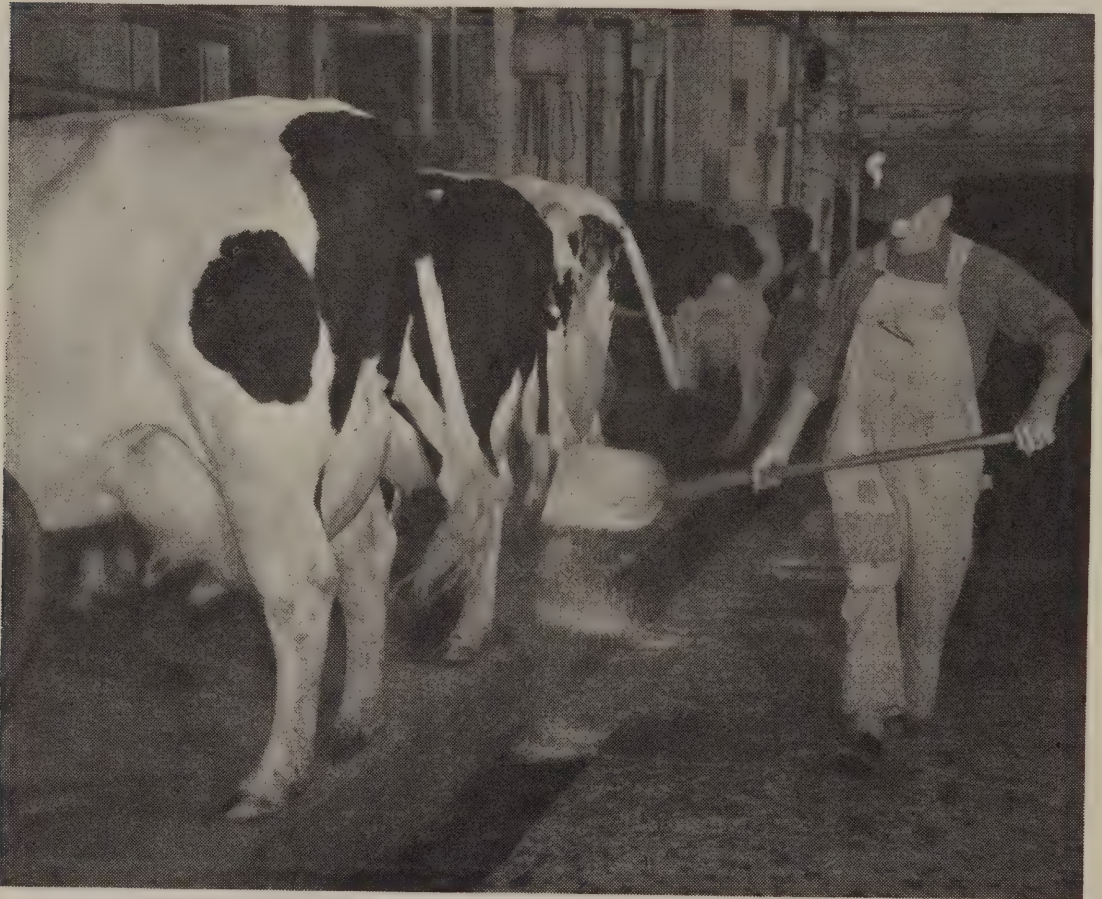
This is equivalent to: 90 cents per cwt. for 20 percent superphosphate,
85.5 cents per cwt. for 19 percent superphosphate,
81 cents per cwt. for 18 percent superphosphate.

Payment will be made for applying superphosphate to seedings of legumes or grasses, with or without a nurse crop, for use in top dressing established hay, orchard sods, or pasture, or for mixing with manure in the stable or on the dropping boards and used on the farm. No payment will be made for superphosphate used in connection with seedings made with nurse crops unless at least 400 pounds of 20 percent superphosphate or its equivalent are applied per acre. Payment will be made for superphosphate mixed with manure only where the county committee determines that substantially all of the manure is used on forage crops. If this practice is carried out with furnished superphosphate, it will be shown as Practice No. 2A.

RECOMMENDATIONS FOR USE OF SUPERPHOSPHATE

How Much?—The rate of application of superphosphate per acre depends on the crop and on the soil. From 500 to 800 pounds of 20 percent superphosphate, or equivalent, per acre is recommended at the time of planting most field crops on most soils. These rates are also adequate for top dressing most established sods.

How and Where?—On land that is being prepared for seeding, superphosphate is generally applied shortly before or at the time of planting. In order to avoid “fixation” in unavailable forms, superphosphate should not be applied on land that is excessively acid. *Excessively acid soils should be limed sufficiently far in advance of the superphosphate application to permit a substantial reduction of the acidity.* Superphosphate may be applied alone or in combination with nitrogen or potash, or both, depending on soil needs.



The use of superphosphate in the stable at the rate of 1 or 2 pounds per cow per day is becoming an established practice on many farms.

Many farmers are applying part of their superphosphate supply with manure. This may be accomplished by scattering 20 percent superphosphate, or equivalent, in the gutter at the rate of 1 to 2 pounds per cow per day. For poultry manure, the usual rate is 1 to 2 pounds of superphosphate per 100 birds per day.

When?—Because of its relatively low solubility and resistance to the leaching action of water, superphosphate may be applied at most any time of the year on soils that are not subject to severe washing or blowing.

RECOMMENDATIONS ON STORAGE OF SUPERPHOSPHATE

As in the case of limestone, superphosphate furnished under the Agricultural Conservation Program will be delivered throughout the year.

Superphosphate should always be stored under cover to avoid wetting. Care should also be taken to keep the bags from direct contact with the floor or walls when stored for long periods. Wetting frequently results in caking and hardening, making it necessary for the material to be crushed or reground before using. Both of these are expensive practices.

Practice No. 3.—Mixed fertilizer or potash.

Practice No. 3B.—Rate of Payment: 4.5 cents per pound of available phosphoric acid.

Practice No. 3C.—Rate of Payment: 3.5 cents per pound of available potash.

Payment will be made for applying mixed fertilizer or potash to hay or pasture land, orchard sods, or to seedings with or without a nurse crop. When used in connection with new seedings made with nurse crops, payment will not be made for the phosphoric acid or potash unless at least 80 pounds per acre are applied.

RECOMMENDATIONS ON USE OF MIXED FERTILIZER OR POTASH

Maximum returns from mixed fertilizer or potash can only result if the rate of application is adjusted to the soil and the crop to be grown.

How Much?—County Agricultural Agents will be glad to assist in determining proper rates per acre. A copy of "Fertilizer Recommendations for Vermont 1945-46" may be obtained upon request. The rates of mixed fertilizer or potash per acre vary widely with the analysis and the type of material, the type of soil and the crop to be grown. For this reason, it is difficult to give general recommendations that will cover all situations.

When and Where?—Mixed fertilizer or potash generally give best results when applied at the time of planting. When used for top dressing established hay and pasture sods, spring applications usually give better results than fall applications on most soils in Vermont. Fall applications, however, have generally given good enough results to warrant use at that time and are to be particularly recommended as a means of spreading the labor load on farms as well as in fertilizer plants.

RECOMMENDATIONS ON STORAGE OF MIXED FERTILIZER OR POTASH

Mixed fertilizer or potash will not be furnished as conservation materials. Therefore, if you want to use this practice, make plans to get materials from your local dealer. Because of this there should be no extensive storage problem.

Mixed fertilizers or potash should never be permitted to become damp or wet, therefore, should be stored in a dry place. Moisture will cause both mixed fertilizer or potash to harden and cake in the bag. Some of the nitrogen will also be lost from complete fertilizers that become excessively wet.



Good yields of clover and timothy mixture result from use of lime, superphosphate, and potash.

Practice No. 4.—**Mulching.**

Rate of payment: \$5 per ton of air-dried hay, straw, shavings, or sawdust.

Payment will be made for applying mulching materials to commercial orchard land as a mulch. All materials produced on the land during 1946 from grasses, legumes, green manure crops, as well as the mulching material are to be left on the land. It is recommended that at least 1 ton of air-dried straw or its equivalent be used per acre. Mulching materials that are not air-dried will be paid for on an air-dried basis.

RECOMMENDATIONS ON USE OF MULCHING MATERIALS

How Much?—The amount of mulch required varies according to the size of the trees. Trees of bearing age will probably require between 200 and 300 pounds per tree. Apply the mulch under the spread of the branches, keeping it 3 to 4 feet away from the trunk. It is advisable to make the application heavy enough to smother the grass under the trees and to replenish the supply as the mulch decomposes.

Why?—Mulching is not a new practice. It has been tried and found successful for many years on many crops. In the mature orchard, it is almost impossible to produce sufficient quantities of mulching material under the trees to keep the soil in a friable condition. Consequently, more and more growers are bringing in organic material to spread on the soil beneath the trees.



Mulched soils permit moisture and air to penetrate and improve biological activity of the soil.

Some of the beneficial effects of the mulch on the soil include:

- (1) Conservation of soil moisture.
- (2) Improvement in the physical condition of the soil.
(Mulched soils are friable permitting moisture and air to penetrate. Cultivated soils frequently puddle during heavy rains and thus exclude moisture and air.)
- (3) Improvement in the biological activity of the soil.

When?—Mulch may be applied at any time during the growing season.

Adjustment in Payments.—Payments under the 1946 Agricultural Conservation Program are subject to the appropriation hereafter provided for this purpose by the Congress.

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